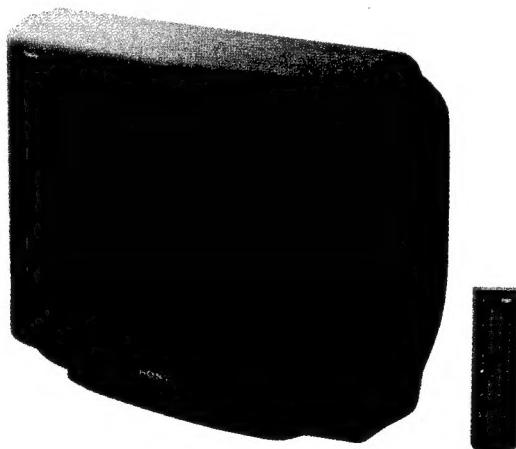


SERVICE MANUAL

AE-2 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-S3411A	RM-832	Italian	SCC-F18K-A	KV-S3413E	RM-832	Spanish	SCC-F33K-A
KV-S3411B	RM-832	French	SCC-F32K-A	KV-S3411K	RM-832	OIRT	SCC-F72K-A
KV-S3411D	RM-832	AEP	SCC-F26 K-A	KV-S3412U	RM-832	UK	SCC-F25J-A



TRINITRON® COLOR TV
SONY®



ITEM MODEL	Television system	Stereo system	Channnel coverage	Color system
Italian	B/G/H, D/K	GERMAN Stereo	ITALIA VHF:A-H2 (C) UHF:21-69 PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC 4.43, NTSC 3.58 (VIDEO IN)
French	B/G/H, D/K L, I	GERMAN Stereo	L VHF:F02-F10 UHF:F21-F60 CABLE:B-Q B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69 I UHF:B21-B69	PAL, SECAM NTSC 4.43, NTSC 3.58 (VIDEO IN)
AEP	B/G/H, D/K	GERMAN Stereo	PAL B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC 4.43, NTSC 3.58 (VIDEO IN)
Spanish	B/G/H, D/K	GERMAN/NICAM Stereo	PAL B/G VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 CABLE TV (2):S01-S05, M1-M10, U1-U10 ITALIA VHF:A-H2 (C) UHF:21-69 D/K VHF:R01-R12 UHF:R21-R69	PAL, SECAM NTSC 4.43, NTSC 3.58 (VIDEO IN)
OIRT	B/G/H, D/K	GERMAN Stereo	B/G/H VHF:E2-E12 UHF:E21-E69 CABLE TV (1):S1-S41 D/K VHF:R1-R12 UHF:R21-R60	PAL, SECAM NTSC 4.43, NTSC 3.58 (VIDEO IN)
UK	I	NICAM Stereo	UHF:B21-B69	PAL SECAM, NTSC 4.43 NTSC 3.58 (VIDEO IN)

MODEL	Italian	French	AEP	Spanish	OIRT	UK
Power consumption	130Wh	136Wh	150Wh	154Wh	136Wh	228Wh

SPECIFICATIONS

- ④ 1 21-pin Euro connector (CENELEC standard)
 - inputs for audio and video signals
 - inputs for RGB
 - outputs of TV video and audio signals
 - ④ 2/④ 2 21-pin Euri connector
 - inputs for audio and video signals
 - inputs for S video
 - outputs for audio and video signals (selectable)
 - ④ 4/④ 21-pin Euro connector
 - inputs for audio and video signals
 - inputs for S video
 - outputs for audio and video signals (monitor out)
 - ④ 2, /④ 4 S video inputs
 - 4-pin DIN
 - ④ Audio inputs (L, R) phono jacks
 - ④ S video output-4pin DIN
 - ④ Audio outputs - phono jacks
 - ④ Audio outputs (variable) - phono jacks
 - External speaker terminals : 2-pin DIN
- Sound output 2 × 15 (RMS)
 2 × 35 (Music)
- Power requirement 220-240V
- Dimensions Approx. 813 × 648 × 596 mm
- Weight Approx. 79kg
- Supplied accessories RM-832 Remote Commander(1)
 IEC designation R6 batteries(2)
 NICAM, FASTTEXT
- Other features
- 【RM-832】**
- Remote control system infrared control
- Power requirements 3V dc
 2 batteries IEC designation
 R6 (size AA)
- Dimention Approx. 65 × 222 × 21 mm (w/h/d)
- Weight Approx. 157kg
 (Not including Batteries)

Design and specifications are subject to change without notice.

【FRONT】

- ④ 3 Video input - phono jack
- ④ Audio inputs - phono jacks
- ④ 3 S video input 4-pin DIN
- ④ Headphone jacks : Stereo minijack

	KV-S3411A	KV-S3411B	KV-S3411D	KV-S3413E	KV-S3411K	KV-S3412U
Pal Comb	ON	ON	ON	ON	ON	ON
P i P	ON	ON	ON	ON	ON	ON
RGB Priority	ON	OFF	ON	ON	ON	ON
Woofer Box	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON	ON
Scart 2	ON	ON	ON	ON	ON	ON
Front In (3)	ON	ON	ON	ON	ON	ON
Scart 4	ON	ON	ON	ON	ON	ON
Dyn. Convergence	ON	ON	ON	ON	ON	ON
Projector	OFF	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	ON	ON	ON	ON	ON	ON
Norm B/G	ON	ON	ON	ON	ON	OFF
Norm 1	OFF	ON	OFF	OFF	OFF	ON
Norm D/K	ON	ON	ON	ON	ON	OFF
Norm AUS	OFF	OFF	OFF	OFF	OFF	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF
Norm SAT	OFF	OFF	OFF	OFF	OFF	OFF
Norm M	OFF	OFF	OFF	OFF	OFF	OFF
Language Preset	Italiano	Francais	Deutsch	Espanol	English	English

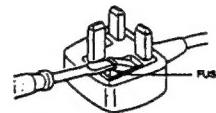
WARNING KV-S3412U only

The flexible mains lead is supplied to connect to a B.S. 1363 fused plug having a fuse of 5 amp capacity. Should the fuse need to be replaced, use a 5 AMP FUSE approved by ASTA to BS 1362, ie carries the  mark.

If the plug supplied with this appliance is not suitable for your socket outlets in your home, it should be cut off and an appropriate plug fitted.

The plug severed from the mains lead must be destroyed as a plug with bared wires is dangerous if engaged in a live socket outlet.

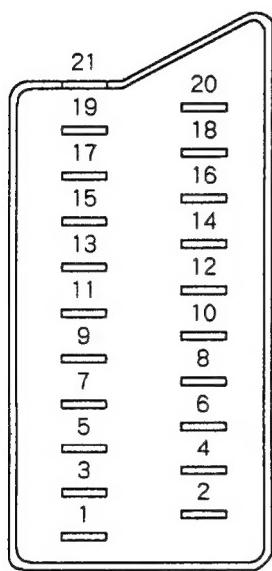
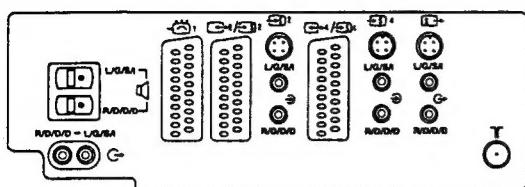
When an alternative type of plug is used it should be fitted with a 5 AMP FUSE, otherwise the circuit should be protected by a 5 AMP FUSE at the distribution board.



How to replace the fuse

Open the fuse compartment with the blade screwdriver, and replace the fuse.

21 pin connector (◎1 ◎2/◎4)



Pin No	1	2	4	Signal	Signal level
1	○	○	○	Audio output B (right)	Standard level : 0.5Vrms Output impedance : Less than 1kohm *
2	○	○	○	Audio input B (right)	Standard level : 0.5Vrms Input impedance : More than 10kohms *
3	○	○	○	Audio output A (left)	Standard level : 0.5Vrms Output impedance : Less than 1kohm *
4	○	○	○	Ground (audio)	
5	○	○	○	Ground (blue)	
6	○	○	○	Audio input A (left)	Standard level : 0.5Vrms Input impedance : More than 10kohms *
7	○	●	●	Blue input	0.7 ± 3dB, 75ohms, positive
8	○	○	○	Function select (AV control)	High state (9.5 - 12V) : Part mode Low state (0 - 2V) : TV mode Input impedance : More than 10kohms Input capacitance : Less than 2nF
9	○	○	○	Ground (green)	
10	○	○	○	Open	
11	○	●	●	Green	Green signal : 0.7V ± 3dB, 75ohms, positive
12	○	○	○	Open	
13	○	○	○	Ground (red)	
14	○	○	○	Ground (blanking)	
15	○	-	-	Red input	0.7V ± 3dB, 75ohms, positive
	-	○	○	(S signal) chroma input	0.3V ± 3dB, 75ohms, positive
16	○	●	●	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75ohms
17	○	○	○	Ground (video output)	
18	○	○	○	Ground (video input)	
19	○	○	○	Video output	1V ± 3dB, 75ohm, positive Sync : 0.3V (- 3, +)
	○	-	-	Video input	1V ± 3dB, 75ohm, positive Sync : 0.3V (- 3, +)
20	-	○	○	Video Input/Y (S signal)	1V ± 3dB, 75ohm, positive Sync : 0.3V (- 3, +) 10dB
21	○	○	○	Common ground (plug, shield)	

○ Connected ● unconnected (open) * at 20Hz - 20kHz

4 Pin connector (◎)

Pin No	Signal	Signal level
1	Ground	
2	Ground	
3	Y (S signal) input	1V ± 3dB 75ohm, positive Sync 0.3V $^{+3}_{-10}$ dB
4	C (S signal) input	0.3V ± 3dB 75ohm, positive

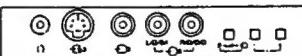


TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
1. GENERAL			4. CIRCUIT ADJUSTMENTS		
1-1. Overview.....	6		4-1. Electrical Adjustments	30	
1-2. Step 3 Tuning in to TV stations	7		4-2. Volume Electrical Adjustments	34	
1-3. Additional Presetting Functions	8		4-3. Test Mode 2 :	35	
1-4. Watching the TV	10		4-4. Error Message.....	36	
1-5. Adjusting and Setting the TV Using the Menu	11		4-5. Error II C Bus Diagnosis System in AE2 Chassis	36	
1-6. PIP (Picture-In-Picture).....	12				
1-7. Teletext.....	12				
1-8. Connecting and Operating optional Equipment	14				
1-9. For Your Information	16				
2. DISASSEMBLY			5. DIAGRAMS		
2-1. Rear Cover Removal	17		5-1. Block Diagram (1)	37	
2-2. Speaker Removal	17		5-2. Block Diagram (2)	41	
2-3. Chassis Assy Removal	18		5-3. Circuit Boards Location.....	45	
2-4. Service Position	18		5-4. Schematic Diagrams and Printed Wiring Boards	45	
2-5. M, V and A1 Boards Removal.....	19		• H1 Board.....	46	
2-6. D2 and B1 Boards Removal.....	19		• H2 Board.....	46	
2-7. Extension Board	20		• F2 Board	47	
2-8. F Bracket Removal.....	20		• F1 Board	47	
2-9. J Board Removal	21		• J Board	50	
2-10. P Board Removal.....	21		• A Board	55	
2-11-1. Wire Rod.....	22		• M Board	62	
2-11-2. Wire Rod.....	22		• D Board	67	
2-12. Degaussing Coil Removal	23		• V Board	71	
2-13. Picture Tube Removal.....	24		• P Board	73	
3. SET-UP ADJUSTMENTS			• B Board	73	
3-1. Beam Landing	25		• D1 Board	80	
3-2. Convergence	26		• A1 Board	83	
3-3. Focus	29		• VM Board	86	
3-4. White Balance	29		• C Board	87	
			• IF Board	90	
			5-5. Schematic Diagram of Tuner	97	
			5-6. Semiconductors	98	
			6. EXPLODED VIEWS		
			6-1. Chassis	100	
			6-2. Picture Tube	101	
			7. ELECTRICAL PARTS LIST	102	

CAUTION

**SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE
AND THE ANODE CAP TO THE METAL CHASSIS, CRT
SHIELD, OR CARBON PAINTED ON THE CRT, AFTER
REMOVING THE ANODE.**

WARNING !!

**AN ISOLATION TRANSFORMER SHOULD BE USED
DURING ANY SERVICE TO AVOID POSSIBLE SHOCK
HAZARD, BECAUSE OF LIVE CHASSIS.
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CON-
NECTED TO THE AC POWER LINE.**

SAFETY-RELATED COMPONENT WARNING!!

**COMPONENTS IDENTIFIED BY SHADING AND MARK Δ
ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS
AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE
OPERATION. REPLACE THESE COMPONENTS WITH
SONY PARTS WHOSE PART NUMBERS APPEAR AS
SHOWN IN THIS MANUAL OR IN SUPPLEMENTS
PUBLISHED BY SONY.**

ATTENTION

**APRES AVOIR DECONNECTE LE CAP DE L'ANODE,
COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE
ET CELUI DE L'ANODE DU CAP AU CHASSIS
METALLIQUE DE L'APPAREIL, OU AU COUCHE DE
CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU
BLINDAGE DU TUBE CATHODIQUE.**

ATTENTION!!

**AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION
PROVENANT D'UN CHASSIS SOUS TENSION, UN
TRANSFORMATEUR D'ISOLEMENT DOIT ETRE
UTILISE LORS DE TOUT DEPANNAGE.
LE CHASSIS DE CE RECEPTEUR EST DIRECTEMENT
RACCORDE A L'ALIMENTATION SECTEUR.**

ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

**LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET
PAR UNE MARQUE Δ SUR LES SCHÉMAS DE
PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE
PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA
SÉCURITÉ DU FonCTIONNEMENT. NE LES REM-
PLACER QUE PAR DES COMPOSANTS SONY DONT LE
NUMÉRO DE PIÈCE EST INDIQÜÉ DANS LE PRÉSENT
MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR
SONY.**

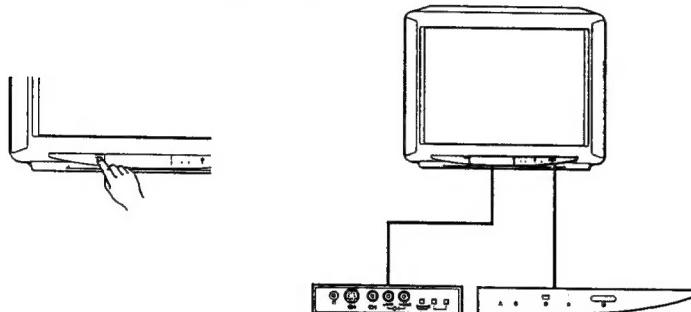
1-1. OVERVIEW

SECTION 1 GENERAL

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

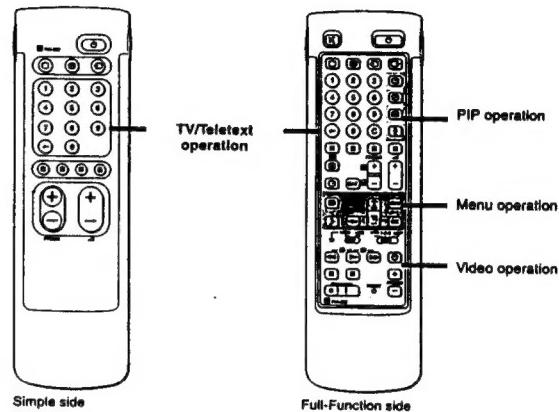
This section briefly describes the buttons and controls on the TV set and on the Remote Commander. For more information, refer to the pages given next to each description.

TV set-front



Symbol	Name	Refer to page
①	Main power switch	14
②	Standby Indicator	14
A-B	Stereo A/B Indicators	16
③	Headphones jack	22
④, ⑤, ⑥, ⑦,	Input jacks (S video/video/audio)	22
⑧	Function selector (Programme/volume/input)	15
⑨	Adjustment buttons for function selector	15

Remote commander RM-832



Note
The SAT button does not operate with this TV.

TV/Teletext operation

Symbol	Name	Refer to page
◀	Muting on/off button	15
○	Standby button	14
□	TV power on/TV mode selector button	14
■	Teletext button	15
□	Input mode selector	15
□	Output mode selector	23
1,2,3,4,5,6, 7,8,9 and 0	Number buttons	14
---	Double-digit entering button	14
C	Direct channel entering button	13
△+/-	Volume control button	14
PROGR+/-	Programme selectors	14
■■	Teletext page access buttons	19
■■	Picture adjustment button	16
■■	Sound adjustment button	16
■■	On-screen display button	15
■■	Teletext hold button	19
■■	Time display button	15
■■■■	Fastext buttons	19

PIP (Picture-in-Picture) operation

Symbol	Name	Refer to page
□	PIP on/off button	18
↑	PIP source selector	18
■	Swap button	18
◎	PIP position changing button	18

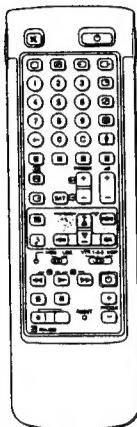
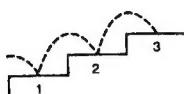
Menu operation

Symbol	Name	Refer to page
MENU	Menu on/off button	8
△+/-	Select buttons	8
OK	OK (confirming) button	8
←	Back button	8

Video operation

Symbol	Name	Refer to page
MEM USE	MEM/USE switch	25
MEM	MEM indicator	25
VTR 1/2/3, MDP	Video equipment selector	25
◀▶▶▶◀▶▶▶◀▶▶▶	Video equipment operation buttons	25
■ II ◉ ○ ◉	PROGR +/- buttons	25
RESET	RESET button	25

1-2. STEP 3 – TUNING IN TO TV STATIONS



Once you have set up the TV, you can choose the language of the menu. Then you should preset the channels (up to 100 channels) by choosing either the automatic or manual method.

The automatic method is easier if you want to preset all receivable channels at once. Use the manual method if you only have a few channels and want to preset channels one by one. The manual method is also convenient for allocating programme numbers to various video input sources.



Auto Menu

PROG	SYS	CH	SEARCH	LABEL	APT
> 1	C21	all	.....	(none)	
2	C22	all	.....	(none)	
3	C23	all	.....	(none)	
4	C24	all	.....	(none)	
5	C25	all	.....	(none)	
6	C26	all	.....	(none)	
7	C27	all	.....	(none)	
8	C28	all	.....	(none)	
9	C29	all	.....	(none)	
10	C30	all	.....	(none)	
11	C31	all	.....	(none)	
12	C32	all	.....	(none)	
13	C33	all	.....	(none)	
14	C34	all	.....	(none)	
15	C35	all	.....	(none)	
16	C36	all	.....	(none)	
17	C37	all	.....	(none)	
18	C38	all	.....	(none)	
19	C39	all	.....	(none)	
20	C40	all	.....	(none)	
21	C41	all	.....	(none)	
22	C42	all	.....	(none)	
23	C43	all	.....	(none)	
24	C44	all	.....	(none)	
25	C45	all	.....	(none)	
26	C46	all	.....	(none)	
27	C47	all	.....	(none)	
28	C48	all	.....	(none)	
29	C49	all	.....	(none)	
30	C50	all	.....	(none)	
31	C51	all	.....	(none)	
32	C52	all	.....	(none)	
33	C53	all	.....	(none)	
34	C54	all	.....	(none)	
35	C55	all	.....	(none)	
36	C56	all	.....	(none)	
37	C57	all	.....	(none)	
38	C58	all	.....	(none)	
39	C59	all	.....	(none)	
40	C60	all	.....	(none)	
41	C61	all	.....	(none)	
42	C62	all	.....	(none)	
43	C63	all	.....	(none)	
44	C64	all	.....	(none)	
45	C65	all	.....	(none)	
46	C66	all	.....	(none)	
47	C67	all	.....	(none)	
48	C68	all	.....	(none)	
49	C69	all	.....	(none)	
50	C70	all	.....	(none)	
51	C71	all	.....	(none)	
52	C72	all	.....	(none)	
53	C73	all	.....	(none)	
54	C74	all	.....	(none)	
55	C75	all	.....	(none)	
56	C76	all	.....	(none)	
57	C77	all	.....	(none)	
58	C78	all	.....	(none)	
59	C79	all	.....	(none)	
60	C80	all	.....	(none)	
61	C81	all	.....	(none)	
62	C82	all	.....	(none)	
63	C83	all	.....	(none)	
64	C84	all	.....	(none)	
65	C85	all	.....	(none)	
66	C86	all	.....	(none)	
67	C87	all	.....	(none)	
68	C88	all	.....	(none)	
69	C89	all	.....	(none)	
70	C90	all	.....	(none)	
71	C91	all	.....	(none)	
72	C92	all	.....	(none)	
73	C93	all	.....	(none)	
74	C94	all	.....	(none)	
75	C95	all	.....	(none)	
76	C96	all	.....	(none)	
77	C97	all	.....	(none)	
78	C98	all	.....	(none)	
79	C99	all	.....	(none)	
80	C100	all	.....	(none)	

Before you begin

- Check that the Full-Function side of the Remote Commander is visible.
- Locate Menu operation buttons on the Remote Commander. They are shaded in the illustration at the left.

1 Display the Menu

- Depress **□** on the TV. The TV will switch on. If the standby indicator on the TV is lit, press **□** or a number button on the Remote Commander.
- Press the **MENU** button. The main menu appears. (See Fig. 1.)

MENU

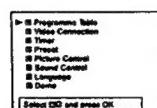


Fig. 1.

2 Choose a language

- Select **»Language«** with the **△** or **▽** button and press the **OK** button. The LANGUAGE menu appears. (See Fig. 2.)
 - Select the language you want with **△** or **▽** and press **OK**, then press **←**.
- Now, choose one of the following methods:
- Preset Channels Automatically** or
 - Preset Channels Manually**.



Fig. 2.

To go back to the main menu
Keep pressing **←**

To go back to the normal TV picture
Press **MENU**.

Note on the DEMO function
If you choose «Demo» on the main menu, you can see a sequential demonstration on the menu functions.

Use this method if there are only a few channels to preset or if you want to preset channels one by one. You may also allocate programme numbers to various video input sources.

If you have made a mistake
Press **←** to go back to the previous position.
To go back to main menu
Keep pressing **←**.
To go back to the normal TV picture
Press **MENU**.

3 Preset channels automatically

- Select **»Preset«** with **△** or **▽** and press **OK**. The PRESET menu appears. (See Fig. 3.)
- Select **»Auto Programme«** with **△** or **▽** and press **OK**. The AUTO PROGRAMME menu appears. (See Fig. 4.)
- Press **OK** repeatedly until the first element of the **»PROG«** number is highlighted.
- Select the programme (number button) from which you want to start presetting. Select the first element of the double-digit number with **△** or **▽** or the number buttons (e.g. For «04», select **»0«** here) and press **OK**. The second element of **»PROG«** will be highlighted.
- Select the second element of the double-digit number with **△** or **▽** or the number buttons (e.g. For «04», select **»4«** here) (See Fig. 5.) and press **OK**.
- Press **OK**. The automatic channel presetting starts.

When presetting is finished, the preset menu reappears. All available channels are now stored on successive number buttons.

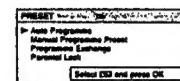


Fig. 3.

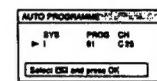


Fig. 4.

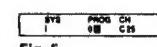


Fig. 5.



Fig. 6.

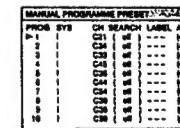


Fig. 7.

1-3. ADDITIONAL PRESETTING FUNCTIONS

To tune in a channel by frequency
After selecting F in step 5, enter three digits using the number buttons.

- 3 Using Δ + or ∇ -, select the programme position (number button) to which you want to preset a channel, and press OK.
- 4 Select if necessary, a video input source (EXT) with Δ + or ∇ -. Then press OK. The CH position will be highlighted. (See Fig. 8.)

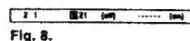


Fig. 8.

- 5 Using Δ + or ∇ -, select C (to preset a regular channel) or F (to tune in by frequency) and press OK. The first element of the «CH» number will be highlighted. If you have selected EXT in step 4, select the video input source with Δ + or ∇ -. (See Fig. 9.)

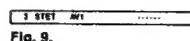


Fig. 9.

There are two ways to preset channels. If you know the channel number, go to step «6-Manual». Or

If you don't know the channel number, go to step «6-Search».

6 Manual

- a Select the first element of the «CH» number with Δ + or ∇ - or the number buttons and press OK. The second element of the «CH» number will be highlighted.
- b Select the second element of the number with Δ + or ∇ - or the number buttons. The selected number appears. (See Fig. 10.)
- c Press OK. The «SEARCH» position is highlighted and the selected channel is now stored. (See Fig. 11.)
- d Press OK until the cursor appears by the next programme position.
- e Repeat steps 3 to 6 to preset other channels.

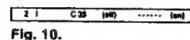


Fig. 10.

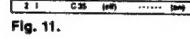


Fig. 11.

6 Search

- a Press OK repeatedly until the colour of the SEARCH position changes.
- b Start searching for the channel with Δ + (up) or ∇ - (down). The CH position changes colour. (See Fig. 12.) The CH number starts counting up or downwards. When a channel is found, it stops. (See Fig. 13.)
- c Press OK if you want to store this channel. If not, press Δ + or ∇ - to continue channel searching.
- d Press OK until the cursor appears by the next programme position.
- e Repeat steps 3 to 6 to preset other channels.

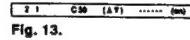
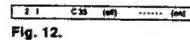
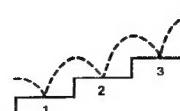


Fig. 13.

If you have made a mistake
Press \leftarrow to go back to the previous position.

To go back to main menu
Keep pressing \leftarrow .
To go back to the normal TV picture
Press MENU.



This section shows you additional presetting functions such as exchanging or skipping programme positions, captioning a station name, manual fine-tuning, and using the parental lock.

Before you begin

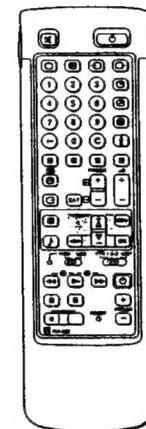
- Check that the Full Function side of the Remote Commander is visible.
- Locate the Menu operation buttons.

Exchanging Programme Positions

With this function, you can exchange the programme positions to a preferable order.

- 1 Press MENU to display the main menu.
- 2 Select «Preset» with Δ + or ∇ - and press OK. The PRESET menu appears.
- 3 Select «Programme Exchange» with Δ + or ∇ - and press OK. The PROGRAMME EXCHANGE menu appears. (See Fig. 14.)
- 4 Using Δ + or ∇ -, select the programme position you want to exchange with another and press OK. The colour of the selected position changes. (See Fig. 15.)
- 5 Using Δ + or ∇ -, select the programme position to be exchanged and press OK. Now the two programme positions have been exchanged. (See Fig. 16.)
- 6 Repeat steps 4 and 5 to exchange other programme positions.

PROGRAMME EXCHANGE



For programme positions beyond 15
The display scrolls automatically.

If you have made a mistake
Press \leftarrow to go back to the previous position.

To go back to main menu
Keep pressing \leftarrow .

To go back to the normal TV picture
Press MENU.

PROGRAMME EXCHANGE		PROGRAMME EXCHANGE	
PROG CH	LABEL	PROG CH	LABEL
1 AV1	VHS	2 C2B	ITV
2 C2B	---	3 C4	---
3 C4	---	4 C5	---
4 C5	---	5 C6	---
5 C6	---	6 C7	---
6 C7	---	7 C8	---
7 C8	---	8 C9	---
8 C9	---	9 C10	---
9 C10	---	10 C11	---
10 C11	---	11 C12	---
11 C12	---	12 VIDEO1	---
12 VIDEO1	---	13 VIDEO2	---
13 VIDEO2	---	14 VIDEO3	---
14 VIDEO3	---	15	---
15	---	16	---

Fig. 14.

PROGRAMME EXCHANGE			
PROG CH	LABEL	PROG CH	LABEL
1 AV1	VHS	2 C2B	ITV
2 C2B	---	3 C4	---
3 C4	---	4 C5	---
4 C5	---	5 C6	---
5 C6	---	6 C7	---
6 C7	---	7 C8	---
7 C8	---	8 C9	---
8 C9	---	9 C10	---
9 C10	---	10 C11	---
10 C11	---	11 C12	---
11 C12	---	12 VIDEO1	---
12 VIDEO1	---	13 VIDEO2	---
13 VIDEO2	---	14 VIDEO3	---
14 VIDEO3	---	15	---

Fig. 15.

PROGRAMME EXCHANGE			
PROG CH	LABEL	PROG CH	LABEL
1 AV1	VHS	2 C2B	ITV
2 C2B	---	3 C4	---
3 C4	---	4 C5	---
4 C5	---	5 C6	---
5 C6	---	6 C7	---
6 C7	---	7 C8	---
7 C8	---	8 C9	---
8 C9	---	9 C10	---
9 C10	---	10 C11	---
10 C11	---	11 C12	---
11 C12	---	12 VIDEO1	---
12 VIDEO1	---	13 VIDEO2	---
13 VIDEO2	---	14 VIDEO3	---
14 VIDEO3	---	15	---

Fig. 16.

Tuning in a Channel Temporarily

You can tune in a channel temporarily, even when it has not been preset. Use the buttons on the Full-Function side of the Remote Commander.

- 1 Press C on the Remote Commander. The indication «C» appears on the screen.
- 2 Enter the double-digit channel number using the number buttons (e.g. for channel 4, first press 0, then 4). The channel appears. However, the channel will not be stored.

MANUAL PROGRAMME PRESET

Skipping Programme Positions

You can skip unused programme positions when selecting programmes with the PROGR +/- buttons. However, the skipped programmes may still be called up when you use the number buttons.

- 1 Press MENU to display the main menu.
- 2 Select »Preset« with Δ + or ∇ – and press OK. The PRESET menu appears.
- 3 Select »Manual Programme Preset« with Δ + or ∇ – and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 17.)
- 4 Using Δ + or ∇ –, select the programme position which you want to skip and press OK. The »SYS« position changes colour.
- 5 Press Δ + or ∇ – until «---» appears in the SYSTEM position. (See Fig. 18.)
- 6 Press OK. (See Fig. 19.) When you select programmes using the PROGR +/- buttons, the programme position will be skipped.
- 7 Repeat steps 4 to 6 to skip other programme positions.



PROG	SYS	CH	SEARCH	LABEL	AFT
1		C1	■■■■■	■■■■■	
2		C2	■■■■■	■■■■■	
3		C3	■■■■■	■■■■■	
4		C4	■■■■■	■■■■■	
5		C5	■■■■■	■■■■■	
6		C6	■■■■■	■■■■■	
7		C7	■■■■■	■■■■■	
8		C8	■■■■■	■■■■■	
9		C9	■■■■■	■■■■■	
10		C10	■■■■■	■■■■■	

Fig. 17.

3	---	---	---	---	---
---	-----	-----	-----	-----	-----

Fig. 18.

---	---	---	---	---	---
-----	-----	-----	-----	-----	-----

Fig. 19.

MANUAL PROGRAMME PRESET

Captioning a Station Name

You can »name« a channel or an input video source using up to five characters (letters or numbers) to be displayed on the TV screen (e.g. BBC1). Using this function, you can easily identify which channel or video source you are watching.

- 1 Press MENU to display the main menu.
- 2 Select »Preset« with Δ + or ∇ – and press OK. The PRESET menu appears.
- 3 Select »Manual Programme Preset« with Δ + or ∇ – and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 20.)
- 4 Using Δ + or ∇ –, select the programme position you want to caption and press OK repeatedly until the first element of the LABEL position is highlighted.
- 5 Select a letter or number with Δ + or ∇ – and press OK. The next element will be highlighted. Select other characters in the same way. If you want to leave an element blank, select – and press OK. (See Fig. 22.)
- 6 After selecting all the characters, press OK repeatedly until the cursor appears by the next programme position (at the left margin). Now the caption you chose is stored. (See Fig. 21.)
- 7 Repeat steps 5 and 6 to caption names for other channels.

Fig. 20.

1	---	---	---	---
---	-----	-----	-----	-----

Fig. 21.

1	---	---	---	---
---	-----	-----	-----	-----

Fig. 22.

MANUAL PROGRAMME PRESET

Manual Fine-Tuning

Normally, the AFT (automatic fine-tuning) is already operating. However, if the picture is distorted, you can use the manual fine tuning function to obtain better picture reception.

- 1 Press MENU to display the main menu.
- 2 Select »Preset« with Δ + or ∇ – and press OK. The PRESET menu appears.
- 3 Select »Manual Programme Preset« with Δ + or ∇ – and press OK. The MANUAL PROGRAMME PRESET menu appears. (See Fig. 23.)
- 4 Using Δ + or ∇ –, select the programme position corresponding to the channel which you want to manually fine-tune, and press OK repeatedly until the AFT position changes colour.
- 5 Fine-tune the channel with Δ + or ∇ – so that you get the best TV reception. As you press the cursor buttons, the frequency changes from –15 to +15. (See Fig. 24.)
- 6 After fine tuning, press OK. The cursor appears beside the next programme position (at the left margin). (See Fig. 25.) Now the fine-tuned level is stored.
- 7 Repeat steps 4 to 6 to fine-tune other channels.

PROG	SYS	CH	SEARCH	LABEL	AFT
1		C1	■■■■■	■■■■■	
2		C2	■■■■■	■■■■■	
3		C3	■■■■■	■■■■■	
4		C4	■■■■■	■■■■■	
5		C5	■■■■■	■■■■■	
6		C6	■■■■■	■■■■■	
7		C7	■■■■■	■■■■■	
8		C8	■■■■■	■■■■■	
9		C9	■■■■■	■■■■■	
10		C10	■■■■■	■■■■■	

Fig. 24.

1	---	---	---	---
---	-----	-----	-----	-----

Fig. 25.

1	---	---	---	---
---	-----	-----	-----	-----

Fig. 26.

PARENTAL LOCK

Parental Lock

You can prevent undesirable broadcasts from appearing on the screen. We suggest you use this function to prevent children from watching programmes which you consider unsuitable.

- 1 Press MENU to display the main menu.
- 2 Select »Preset« with Δ + or ∇ – and press OK. The PRESET menu appears.
- 3 Select »Parental Lock« with Δ + or ∇ – and press OK. The PARENTAL LOCK menu appears. (See Fig. 26.)
- 4 Using Δ + or ∇ –, select the programme position you want to block and press OK. The selected PROG number, CH and LABEL change colour indicating that this programme is now blocked. (See Fig. 27.)
- 5 Repeat step 4 to block other programme positions.

PROG	CH	LABEL	PROG	CH	LABEL
1	---	---	1	---	---
2	---	---	2	---	---
3	---	---	3	---	---
4	---	---	4	---	---

Fig. 26.

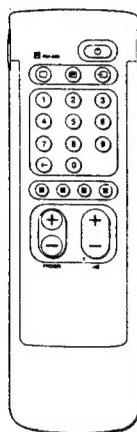
PROG	CH	LABEL	PROG	CH	LABEL
1	---	---	1	---	---
2	---	---	2	---	---
3	---	---	3	---	---

Fig. 27.

If you try to select a programme that has been blocked. The message »LOCKED« appears on the blank TV screen.

operation Instructions

1-4. WATCHING THE TV



This section explains the basic functions you use while watching TV. Most of the operations can be done using the simple side of the Remote Commander.

Switching the TV on and off

Switching on

Depress \square on the TV.

Switching off temporarily

Press \square on the Remote Commander.

The TV enters standby mode and the standby indicator on the front of the TV lights up.

To switch on again

Press \square , PROGR +/-, or one of the number buttons on the Remote Commander.

Switching off completely

Depress \square on the TV.

Selecting TV Programmes

Press PROGR +/- or press number buttons.

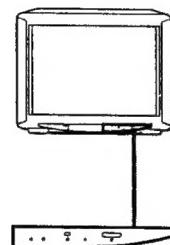
To select a double-digit number

Press \square +/-, then the numbers.

For example, if you want to choose 23, press \square +/-, 2 and 3.

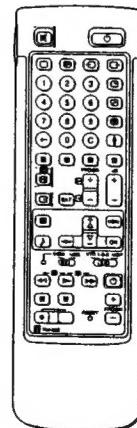
Adjusting the Volume

Press \triangle +/-.



For details of the teletext operation, refer to page 18.

For details of the video input picture, refer to page 22.

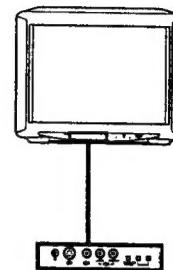


If no picture appears when you depress \square on the TV and if the standby indicator on the TV is lit, the TV is in standby mode. Press \square or one of the number buttons to switch it on.

Operating the TV Using the Buttons on the TV

With the buttons on the TV, you can select programmes, adjust the volume, and select video input sources.

- Press $\square \rightarrow \triangle \rightarrow \square$ button repeatedly until the programme number, \triangle (for volume), or \square (for video input picture) appears. Then adjust with the \leftarrow/\rightarrow buttons.
- Press \rightarrow buttons to switch on the TV from the standby mode.
- Press \rightarrow simultaneously to reset picture and sound controls to the factory preset level (RESET function).



Watching Teletext or Video Input

Watching teletext

- Press \square to view the teletext.
- Press three number buttons to select a page.
- Press one of the coloured buttons for fasttext operation.
- Press \square (PAGE +) or \square (PAGE -) for the next or preceding page.
- To go back to the normal TV picture, press \square .

Watching a video Input picture

Press \square repeatedly until the desired video input appears. To go back to the normal TV picture, press \square .

More Convenient Functions

Use the Full-Function side of the Remote Commander.

Displaying the on screen Indications

- Press \square once to display all the indications. They will disappear after some seconds.
Press \square twice to have the programme number and label stay on screen. Press twice again to make indications disappear.

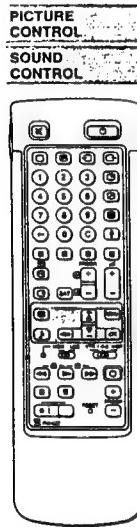
Muting the sound

- Press \square .
To resume normal sound, press \square again.

Displaying the time

- Press \square . This function is available only when teletext is broadcast.
To make the time display disappear, press \square again.

1-5. ADJUSTING AND SETTING THE TV USING THE MENU



If you have made a mistake
Press ← to go back to the previous position.

To go back to the main menu
Keep pressing ←.

To go back to the normal TV picture
Press MENU.

Note:
HUE is only available for NTSC colour system and RESOLUTION does not work for SECAM colour system.

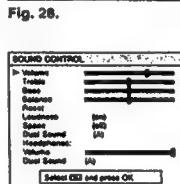
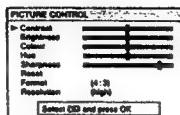
Note on LINE OUT
The audio level and the dual sound mode output from the G+ jack on the rear correspond to the Headphone VOLUME and DUAL SOUND settings.

When watching video input picture,
SOUND to ch. the - - - - -.

Adjusting the Picture and Sound

Although the picture and sound are adjusted at the factory, you can adjust them to suit your own taste. In addition, you can change the aspect ratio of the TV display for wide screen effect, or set the resolution to obtain a higher quality picture. You can also select dual sound (bilingual) programmes when available or adjust the sound for listening with the headphones.

- 1 Press ■ (for picture) or ▾ (for sound) on the Remote Commander.
or
Press MENU and select »Picture Control« or »Sound Control«, then press OK. The PICTURE CONTROL or SOUND CONTROL menu appears. (See Fig. 28 or Fig. 29.)
- 2 Using △ or ▽, select the item you want to adjust and press OK. The selected item changes colour. (See Fig. 30.)
- 3 Adjust the setting with △ or ▽ and press OK. The cursor appears beside the next item (at the left margin). (See Fig. 31.)
For the effect of each control, see the table below.
- 4 Repeat steps 2 and 3 to adjust other items.



Effect of each control

PICTURE CONTROL Effect

Contrast	Less → More
Brightness	Darker → Brighter
Colour	Less → More
Hue	Greenish → Reddish
Sharpness	Softer → Sharper
Reset	Resets picture to the factory preset levels
Format	4:3: Normal 16:9: Wide screen effect
Resolution	Normal high: Obtain a higher quality picture

SOUND CONTROL Effect

Volume	Less → More
Treble	Less → More
Bass	Less → More
Balance	None left → More right
Reset	Resets sound to the factory preset levels
Loudness	off: Normal on: When listening to low volume sound
Space	off: Normal on: Obtain acoustic sound effect
Dual Sound	A: left channel B: right channel stereo mono
The selected mode of the A/D/B indicator on the TV lights up (for NICAM broadcasts see next page)	
Headphones	Less → More
Volume	A: left channel B: right channel stereo mono
Dual Sound	

Selecting Nicam Broadcasts*

This Sony TV has been designed to select Nicam broadcasts when available. Whenever a Nicam broadcast is received, »NICAM« appears briefly on the screen. When the Nicam programme ends, or you switch channels to one without Nicam, the A/D/B indicators, on the TV will switch off. Nicam programmes can be broadcast in two ways. You may select the sound you want to hear in either of these by first following the instructions explained on page 16.

Service Being Broadcast	Action	Effect	Indication on the TV A/D/B
Stereo	Press	Stereo Nicam (Mono 2-Channel) mono	×
	△ + or ▽ -		□ □
	Press △ + or ▽ - again to return to stereo Nicam (mono 2-channel)		
Bilingual	press	Channel A Nicam Channel B Nicam mono	×
	△ + or ▽ -		□ □
	Press △ + or ▽ - again to return to channel A Nicam		

* Depending on availability of service.

Using the Programme Table

On this table, you can see which channel is preset to which programme position. You can also select programmes using this table.

From the main menu, select »Programme Table« with △ + or ▽ - and press OK. The PROGRAMME TABLE menu appears. (See Fig. 32.)

To scroll to higher programme numbers, press △ -.

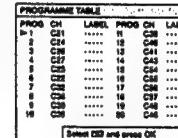


Fig. 32.

Using the Sleep Timer

You can select a time period after which the TV automatically switches into standby mode.

- 1 From the main menu, select »Timer« with △ + or ▽ - and press OK. The TIMER menu appears. (See Fig. 33.)

- 2 Press OK.

The time period option changes colour.

- 3 Select the time period with △ + or ▽ -.

The time period (in minutes) changes as follows:

10 → 20 → 30 → 40 → 50 → 60 → 70 → 80 → 90

OFF

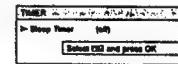


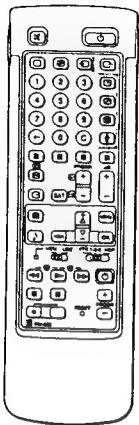
Fig. 33.

- 4 After selecting the time period, press OK.

The cursor moves back to the left margin and the timer starts counting.

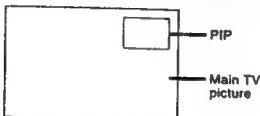
One minute before the TV switches into standby mode, a message is displayed on the screen.

1-6. PIP (PICTURE-IN-PICTURE)



Note
RGB input source
cannot be displayed
in PIP.

With this function you can display a «PIP screen» (small picture) within the main TV picture. In this way you can watch or monitor the video output from any connected equipment (for example from a VTR) while watching TV or vice versa. For information about connection of other equipment, refer to page 21.



Switching PIP on and off

Press **PIP**.
The PIP screen will be displayed. The PIP picture will come from the source chosen when the TV was last used.

To switch PIP off
Press **PIP** again.

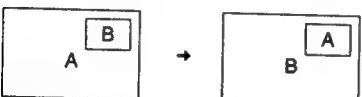
Selecting a PIP source

Press **↓**.
The symbol **↓** will be displayed at the bottom, left-hand corner of the screen.
Press **PIP** repeatedly until the desired source is indicated (e.g. TV, AV 1, AV 2, YC2, AV 3, YC3, AV 4, YC4).

Note
If no video source has been connected, the PIP picture will be noisy.

Swapping screens

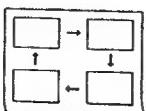
Press **PIP**.
The main screen will switch the picture with the PIP screen.



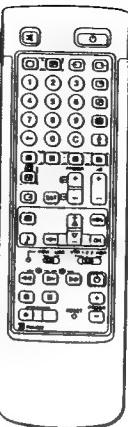
Note
If a TV programme is on the PIP screen and a video source on the main picture, and you want to change channels, first press **PIP** and then the programme buttons or PROGR +/-.

Changing the position of the PIP

Press **PIP** repeatedly to change the position of the PIP screen within the main screen. There are four different positions available.



1-7. TELETEXT



TV stations broadcast an information service called Teletext via the TV channels. Teletext service allows you to receive various information pages such as weather reports or news at any time you want. For advanced teletext operation, use the buttons on the Full-Function side of the Remote Commander.

Direct Access Functions

Switching Teletext on and off

- 1 Select the TV channel which carries the teletext broadcast you want to watch.
- 2 Press **OK** to switch on teletext. A teletext page will be displayed (usually the index page). If there is no teletext broadcast, «No text available» is displayed on the information line of the screen.

To switch teletext off
Press **OK**.

Selecting a teletext page

With direct page selection
Use the number buttons to input the three digits of the chosen page number.
If you have made a mistake, type in any three digits. Then re-enter the correct page number.

- With page-catching
- 1 Select a teletext page with a page overview (e.g. index page).
 - 2 Press **OK** twice. «Page catching» will be displayed on the information line. The last digit if the first displayed page number flashes.
 - 3 Using **Δ** or **▽**, select the desired page and press **OK**. The requested page will appear in a few seconds.

Accessing next or preceding page
Press **OK** (PAGE +) or **OK** (PAGE -). The next or preceding page appears.

Superimposing the teletext display on the TV programme

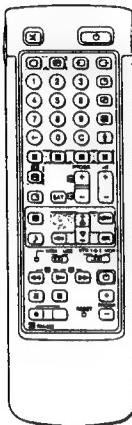
- Press **OK** once in teletext mode or twice in TV mode.
- Press **OK** again to resume normal teletext reception.

- Preventing a teletext page from being updated
- Press **OK** (HOLD). The HOLD symbol **OK** is displayed on the information line.
 - Press **OK** to resume normal teletext reception.

Using Fastext

With Fastext you can access pages with one key stroke. When a Fastext page is broadcast, a colour-coded menu will appear at the bottom of the screen. The colours of this menu correspond to the red, green, yellow and blue buttons on the Remote Commander.

Press the corresponding coloured button on the Remote Commander which corresponds to the colour-coded menu. The page will be displayed after some seconds.



Note
Some of the features may not be available depending on the Teletext service.

Using the Teletext Menu

This TV is provided with a menu-guided teletext system. When teletext is switched on, you can use the menu buttons to operate the teletext menu. Select the teletext menu functions in the following way:

- 1 Press MENU. The menu will be superimposed on the teletext display. (See Fig. 34.)
- 2 Using Δ or ∇ –, select the teletext function you want and press OK. (See Fig. 35.)

USER PAGES/PRESET USER PAGES

See page 20 for information about presetting and operating the user pages.

INDEX

The index will give you an overview of the contents of the teletext and the page numbers.

TOP/BOTTOM/FULL

For convenient reading of a teletext page, you can enlarge the teletext display. After having selected the function, an information line TOP/BOTTOM/FULL will be displayed. (See Fig. 36.)

Press Δ for »Top« to enlarge the upper half; ∇ for »Bottom« to enlarge the lower one and OK for »Full« to resume the normal size.

Press \square to resume normal teletext reception.

TEXT CLEAR

After having selected the function, you can watch a TV programme while waiting for a teletext page to be displayed. (See Fig. 37.)

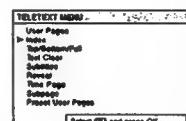
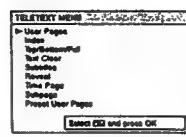
Press \square to resume normal teletext mode.

REVEAL

Sometimes pages contain concealed information, such as answers to a quiz. The reveal option lets you disclose the information. After having selected the function, an information line »REVEAL ON/OFF« will be displayed. (See Fig. 38.)

Using Δ or ∇ –, select ON to reveal the information or OFF to conceal it again.

Press \square to resume normal teletext reception.



To cancel the request
Select »OFF« for the SUBPAGE setting and press OK.

SUBPAGE

You may want to select a particular teletext page from several subpages which are rotated automatically. If you want to select one subpage, follow the operations below:

- 1 Using Δ or ∇ –, select ON for the SUBPAGE setting and press OK.
- 2 To select the desired subpage, enter four digits using PROGR. +/- or the number buttons. (e.g. enter 0002 for the second page in a sequence).

User Page Bank System

You can store up to 30 pages in the »Teletext page bank system«. In this way you have quick access to the pages you watch frequently.

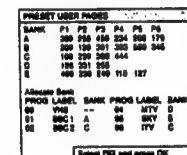
Storing pages

There are 5 »banks« (A to E) for 5 teletext stations. In each bank you can store 6 preferred pages (1P to 6P).

- 1 Press \square (If Teletext is not on already) and MENU to show the TELETEXT MENU display.
- 2 Select PRESET USER PAGES with Δ or ∇ – and press OK.
- 3 Select the desired bank with Δ or ∇ – and press OK. The cursor will go to the first position (P1) of the preferred pages.
- 4 Input the three digits of your first preferred page with the number buttons and press OK. The cursor will go to the second position.
- 5 Repeat step 4 for the other 5 page numbers you want to preset. If you do not want to preset all 6 page numbers available, press OK without inserting any number.
- 6 Select »Allocate Bank« with Δ or ∇ – and press OK.
- 7 Select the programme position for which you have preset pages with Δ or ∇ – and press OK. (See Fig. 39).
- 8 Select the desired bank with Δ or ∇ – (Banks A to E are available) and press OK.
- 9 Repeat steps 3 to 8 for the other 4 banks available.

Displaying User Pages

- 1 Select MENU.
- 2 Select »USER PAGES« with Δ or ∇ – and press OK. A table of the stored preferred pages will be displayed. (See Fig. 40.)
- 3 Select the desired page with Δ or ∇ – and press OK. The page will be displayed after some seconds.



1-8. CONNECTING AND OPERATING OPTIONAL EQUIPMENT

Connecting Optional Equipment

You can connect optional audio-video equipment to this TV such as VTRs, video disc players, and stereo systems.

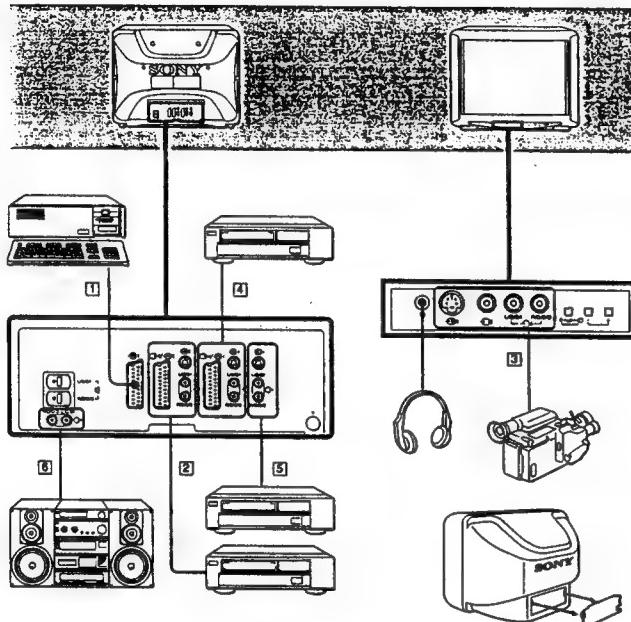
To connect a VTR using the TV terminal
Connect the aerial output of the VTR to the aerial terminal TV of the TV.
We recommend that you tune in the video signal to programme number 00 . For details see «Preset channels manually» on page 9.

If the picture or the sound is distorted
Move the VTR away from the TV.

Note:
After having connected all optional equipment to the TV, attach the supplied cover onto the rear panel (See illustration at the right).

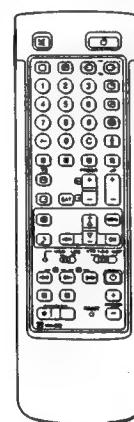
S video input (Y/C Input)
Video signals may be separated into Y (luminance or brightness) and C (chrominance) signals. Separating the Y and C signals prevents them from interfering with one another, and therefore improves picture quality (especially luminance). This TV is equipped with 3 S Video input jacks through which these separated signals can be input directly.

When connecting a monaural VTR
Connect only the white \ominus jack to both the TV and VTR.



Acceptable input signal	Available output signal
① Normal audio/video and RGB signal	Video/audio from TV tuner
② Normal audio/video and S video signal	Video/audio from selected source
③ Normal audio/video and S video signal	No outputs
④ Normal audio/video and S video signal	Video/audio displayed on TV screen (monitor out)
⑤ No inputs	S video/audio signal displayed on TV screen (monitor out)
⑥ No inputs	Audio signal (variable)

Selecting input with PROGR +/- or number buttons
You can preset video input sources to the programme positions so that you can select them with PROGR +/- or number buttons. For details, see «Preset channels manually» on page 9.



Selecting input and output

This section explains how to view the video input picture (of the video source connected to your TV), and how to select the output signal using direct access buttons or the menu system.

Selecting input

Press \ominus repeatedly to select the input source. The symbol of the selected input source will appear.



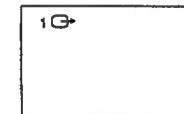
To go back to the normal TV picture
Press \square .

Input modes

Symbol	Input signal
①	Audio/video input through the $\ominus 1$ connector
②	RGB input through the $\ominus 1$ connector
③	Audio/video input through the $\ominus 2/\ominus 2$ connector
④	S video input through the $\ominus 2$ or $\ominus 2$ connector
⑤	Audio/video input through $\ominus 3$ and \ominus on the front
⑥	S video input through the $\ominus 3$ connectors on the front (4-pin connector)
⑦	Audio/video input through the $\ominus 4/\ominus 4$ connector
⑧	S video input through the $\ominus 4$ or $\ominus 4$ connector (4-pin connector)

You can also select the input mode using the $\leftarrow \rightarrow \downarrow \uparrow$ and $\leftarrow \rightarrow$ buttons on the TV.

In this case, first select \ominus , and then press $\leftarrow \rightarrow$ buttons to select the input.



Selecting the output

The $\ominus 2/\ominus 2$ connector outputs the source input from the other connectors.

Press \ominus repeatedly to select the output. The symbol of the selected output source appears.

Output modes

Symbol	$\ominus 2/\ominus 2$ connector outputs
1 \ominus	The audio/video signal from the $\ominus 1$ connector
2 \ominus	The audio/video signal from the $\ominus 2/\ominus 2$ connector
2 \ominus	The audio/S video signal from the $\ominus 2/\ominus 2$ connector
3 \ominus	The audio/video signal from the $\ominus 3$ or $\ominus 3$ connectors
3 \ominus	The audio/S video signal from the $\ominus 3$ or $\ominus 3$ connectors
4 \ominus	The audio/video signal from the $\ominus 4/\ominus 4$ connector
4 \ominus	The audio/S video signal from the $\ominus 4/\ominus 4$ connector
TV \ominus	The audio/video signal from the TV aerial terminal

Checking and selecting the input and output sources using the menu

You can display the menu to see which input sources are selected for the TV screen and PIP screen, and which output source is selected. You can also select them on the menu display.

- 1 Select »Video Connection« with Δ + or ∇ – and press OK. The VIDEO CONNECTION menu appears. (See Fig. 41). You can see which source is selected for the TV and PIP input, and for the output. If you want to select the input and output on this menu, go on to the next step.
- 2 Select TV screen (input source for the TV screen), PIP (input source for the PIP screen), or Output (output source) with Δ + or ∇ – and press OK. One of the source items changes colour. (See Fig. 42.)
- 3 Select the desired source with Δ + or ∇ –. (See Fig. 43.) For details about each source, see the table on page 22.
- 4 Press OK. The selected source is confirmed, and the cursor appears. (See Fig. 44.)
- 5 Repeat steps 2 to 4 to select the source for other inputs or outputs.

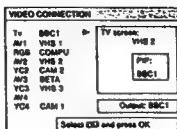


Fig. 41.

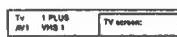


Fig. 42.

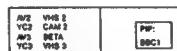


Fig. 43.

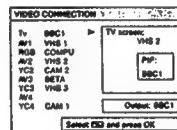
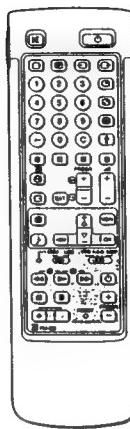


Fig. 44.



When recording
When you use the \bullet (record) button, make sure to press this button and the one to the right of it simultaneously.

- Do not move the Remote Commanders during programming.
- After programming, check to see if all the programmed functions work. It may be the case, that a function cannot be programmed.
- When you want to operate the audio or video equipment. Make sure that the VTR 1/2/3 MDP selector is set to the position you used during programming.
- When you replace the Remote Commander batteries, the programmed functions remain stored for 30 minutes without a battery.
- When the memory of the programmable Remote Commander is full, the MEM indicator lights up.

Remote Control of Other Equipment

You can use the TV Remote Commander to control other remote-controlled equipment. The buttons for video operation have been factory-set to control most of Sony video equipment, such as: Beta, 8mm or VHS VTRs or video disc players. Additionally you can programme these buttons to control also audio and video equipment of other manufacturers.

Tuning the Remote Commander to Sony equipment

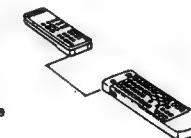
- 1 Set the VTR 1/2/3 MDP selector according to the equipment you want to control:
VTR 1: Beta or ED Beta VTR
VTR 2: 8mm VTR
VTR 3: VHS VTR
MDP: Video disc player
- 2 Use the buttons indicated in the illustration to operate the additional equipment. If your video equipment is furnished with a COMMAND MODE selector set this selector to the same position as the VTR 1/2/3 MDP selector on the TV Remote Commander. If the equipment does not have a certain function, the corresponding button on the Remote Commander will not operate.

Tuning the Remote Commander to audio or video equipment of other manufacturers

Your TV Remote Commander is a programmable Remote Commander. This means that you can programme the buttons indicated in the illustration with functions of other Remote Commanders. A function can be stored on any of the buttons and on all four levels of the VTR 1/2/3 MDP selector.

Programming a function

- 1 Set the MEM/USE switch to MEM (memorize).
- 2 Set the VTR 1/2/3 MDP selector to the desired position.
- 3 Position the two Commanders head to head (see illustration).
- 4 First press the button on the TV Remote Commander onto which you want to programme a function. Now the MEM indicator on the Remote Commander lights up.
- 5 Then press the button on the other Remote Commander, the function of which you want to programme. As soon as the MEM indicator goes out, the function is stored.
- 6 Repeat steps 4 and 5 for all other functions you want to programme. When you have programmed all buttons on one level of the VTR 1/2/3 MDP selector, select another level.
- 7 When you have finished programming, set the MEM/USE switch to USE.



Clearing programmed functions

- 1 Set the MEM/USE switch to MEM.
- 2 Set the VTR 1/2/3 selector to the level of functions you want to clear.
- 3 Press any of the programmable buttons. Now the MEM indicator lights up.
- 4 Keep the RESET button pressed, using the tip of a pen, until the MEM indicator has flashed four times. Now all programmed functions on this level are cleared.
- 5 Reset the MEM/USE switch to USE.

1-9. FOR YOUR INFORMATION

Troubleshooting

Here are some simple solutions to problems which may affect the picture and sound.

Problem	Solution
No picture (screen is dark), no sound	<ul style="list-style-type: none"> • Plug the TV in. • Press ① on the TV. (If ① indicator is on, press ② or a programme number on the Remote Commander.) • Check the aerial connection. • Check V the selected video source V is on. • Turn the TV off for 3 or 4 seconds and then turn it on again using ①.
Poor or no picture (screen is dark), but good sound	<ul style="list-style-type: none"> • Press ■ to enter the PICTURE CONTROL menu and adjust »Brightness«, »Contrast« and »Colour«.
Good picture but no sound	<ul style="list-style-type: none"> • Press ④ +. • If ④ is displayed on the screen, press ④.
No colour for colour programmes	<ul style="list-style-type: none"> • Press ■ to enter the PICTURE CONTROL menu, select »Reset«, then press OK.
Remote Commander does not function	<ul style="list-style-type: none"> • The batteries are weak. • Set the MEM/USE switch to USE.

If you continue to have problems, have your TV serviced by qualified personnel. Never open the casing yourself.

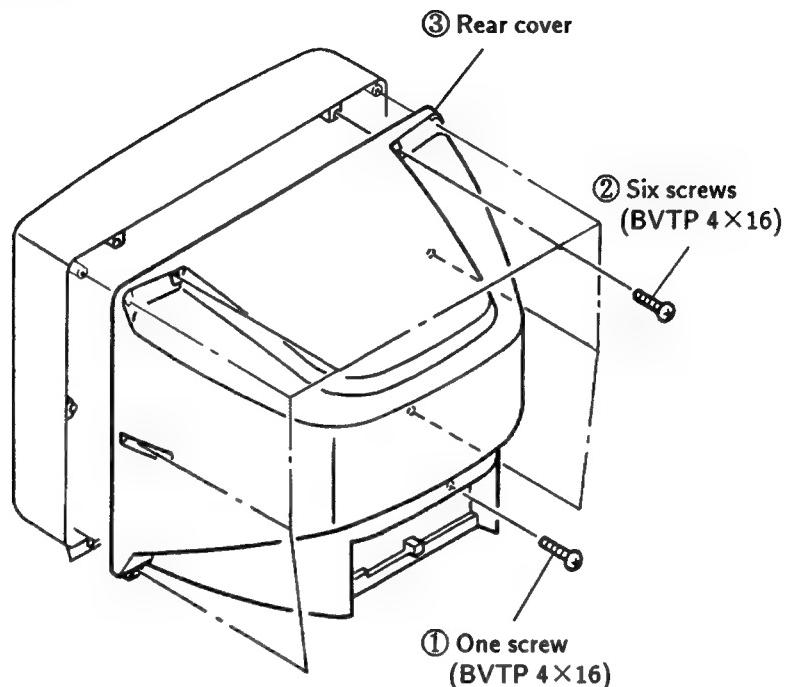
Television Channel Number Guide

Only the main transmitters are listed. Information regarding the regional sub-relay channel numbers can be obtained by contacting The BBC Engineering Information Dept. (081) 752 5040.

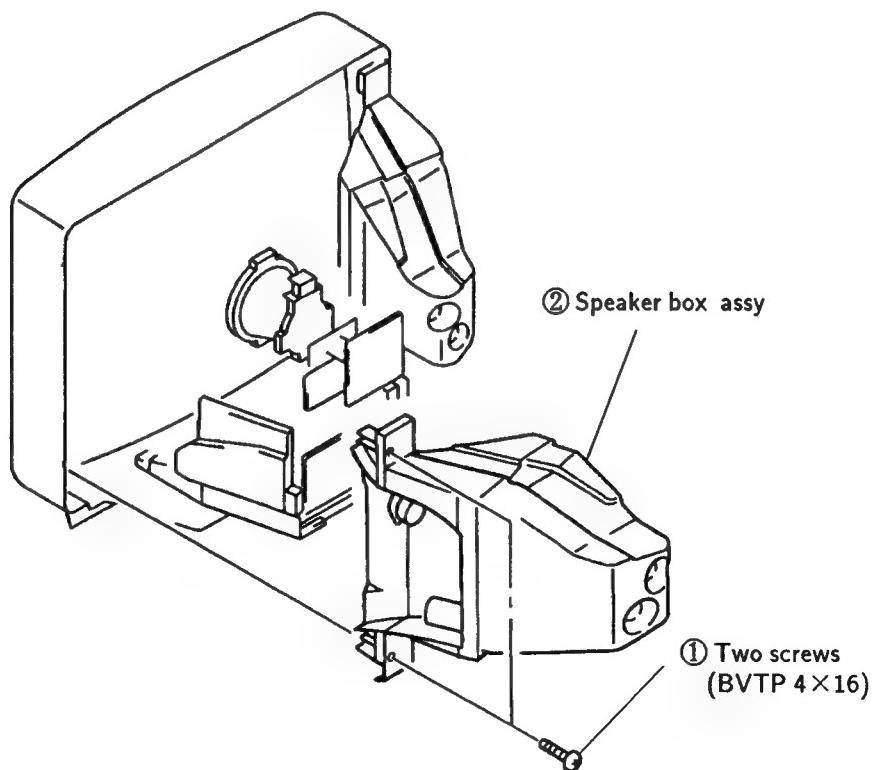
MAIN TRANSMITTERS	BBC1	BBC2	ITV	CH4
London & South East				
Bluebell Hill	40	46	43	65
Crystal Palace	26	33	23	30
Dover	50	56	66	53
Heathfield	49	52	64	67
Oxford	57	63	60	53
South-West				
Beacon Hill	57	63	60	53
Caradon Hill	22	28	25	32
Hunthaw Cross	55	62	59	65
Redruth	51	44	41	47
Stockland Hill	33	26	23	29
Channel Islands				
Fremont Point	51	44	41	47
South				
Hannington	39	45	42	66
Midhurst	61	55	58	68
Rowridge	31	24	27	21
West				
Mendip	58	64	61	54
East				
Sandy Heath	31	27	24	21
Sudbury	51	44	41	47
Tacoxeston	62	55	59	65
Midlands				
Ridge Hill	22	28	25	32
Sutton Coldfield	46	40	43	50
The Wrekin	26	33	23	29
Wakham	56	64	51	54
Northern Ireland				
Brougher Mountain	22	28	25	32
Divis	31	27	24	21
Limavady	55	62	59	65
North				
Belmont	22	29	25	32
Emley Moor	44	51	47	41
North-West				
Winter Hill	55	62	59	65
Douglas (IOM)	68	66	48	56
North-East				
Bilsdale West Moor	33	26	29	23
Caldbeck	30	34	28	32
Chatton	39	45	49	42
Pontop Pike	56	64	51	54
Laxey (IOM)	58	64	51	54
Scotland				
Angus	57	63	60	53
Black Hill	40	46	43	50
Sandale	22	-	-	-
Caldbeck	-	34	28	32
Craigkelly	31	27	24	21
Darvel	33	26	23	29
Durns	22	28	25	32
Eitalhal	33	26	23	29
Kesylang Hill	40	46	43	50
Knock More	33	26	23	29
Rosemarkie	39	45	49	42
Rumster Forest	31	27	24	21
Selkirk	55	62	59	65
Wales				
Blaenplwyf	31	27	24	21
Carmel	57	63	60	53
Llanddona	57	63	60	53
Moel-y-Parc	52	45	49	42
Presely	46	40	43	50
Wenvoe	44	51	41	47

SECTION2 DISASSEMBLY

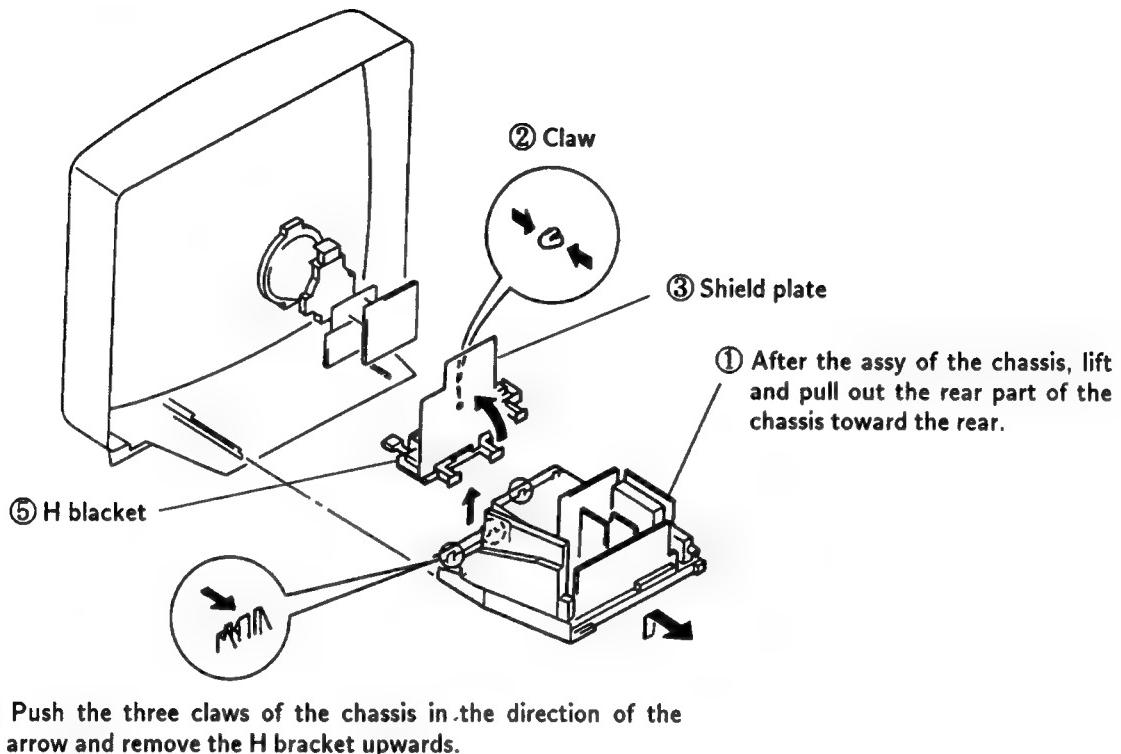
2-1. REAR COVER REMOVAL



2-2. SPEAKER REMOVAL

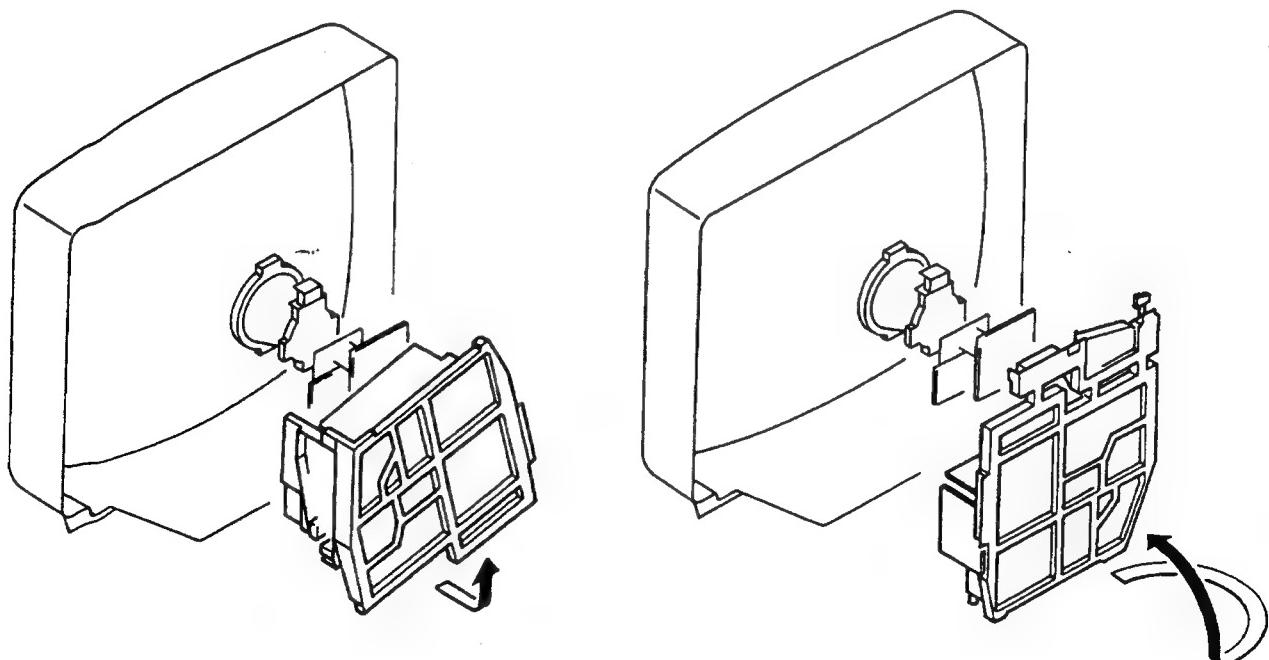


2-3. CHASSIS ASSY REMOVAL

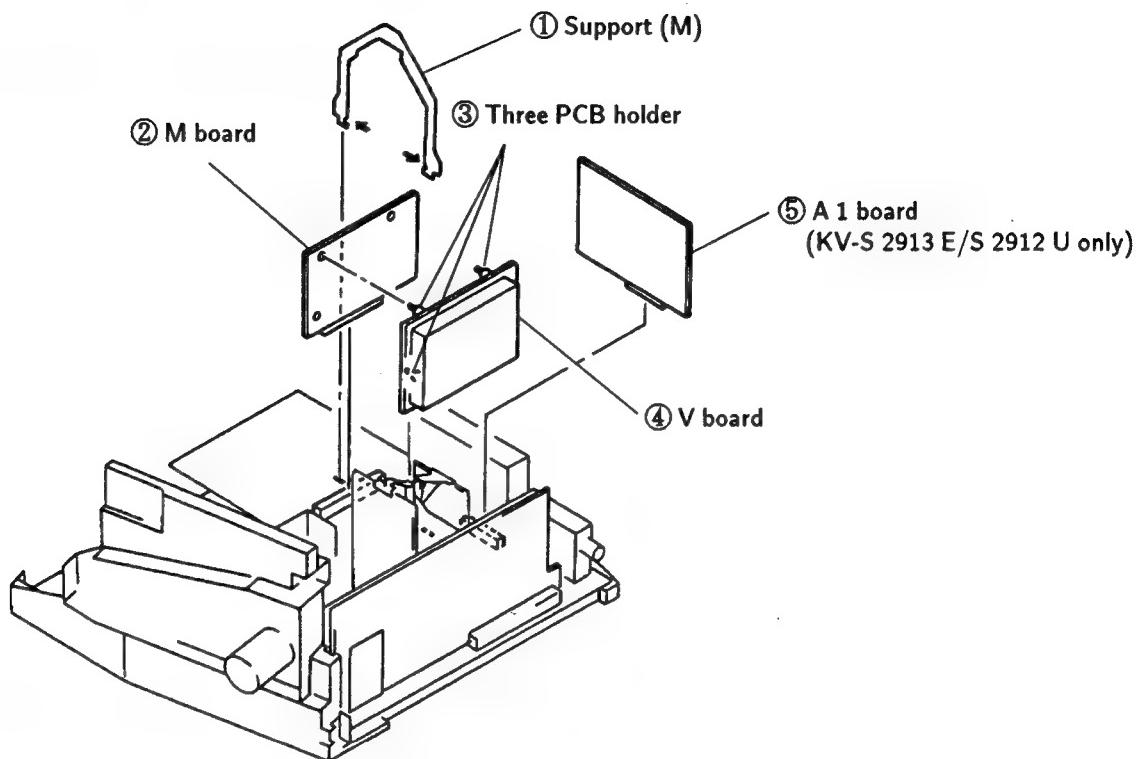


2-4. SERVICE POSITION

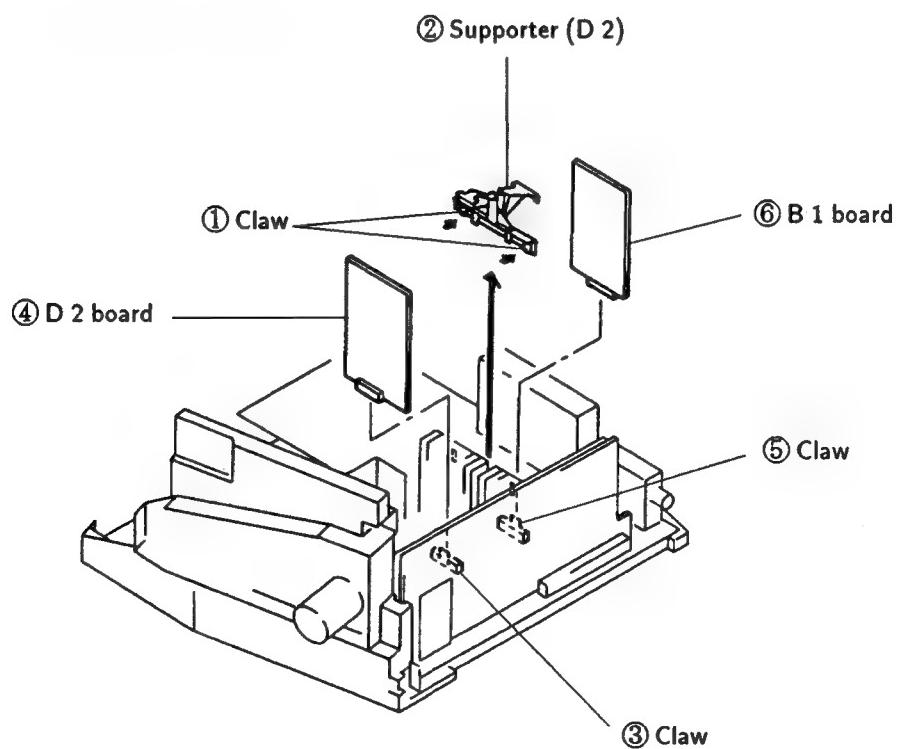
※ Remove the H bracket from the chassis assy and then perform the following servicing.
(Refer to 2-3. CHASSIS ASSY REMOVAL)



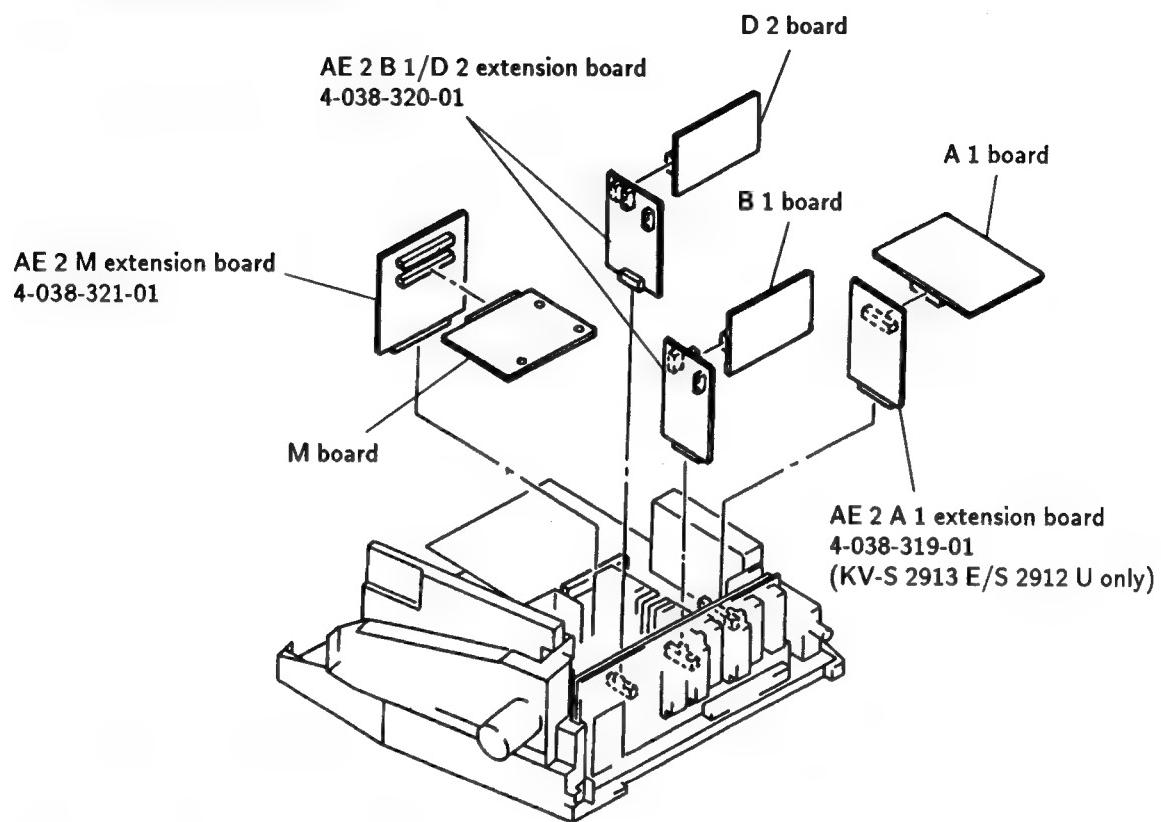
2-5. M, V AND A 1 BOARDS REMOVAL



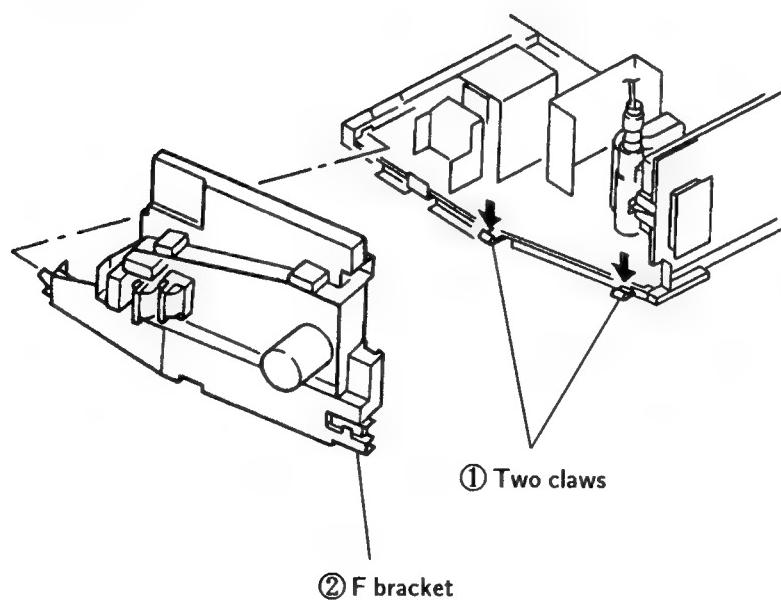
2-6. D 2 AND B 1 BOARDS REMOVAL

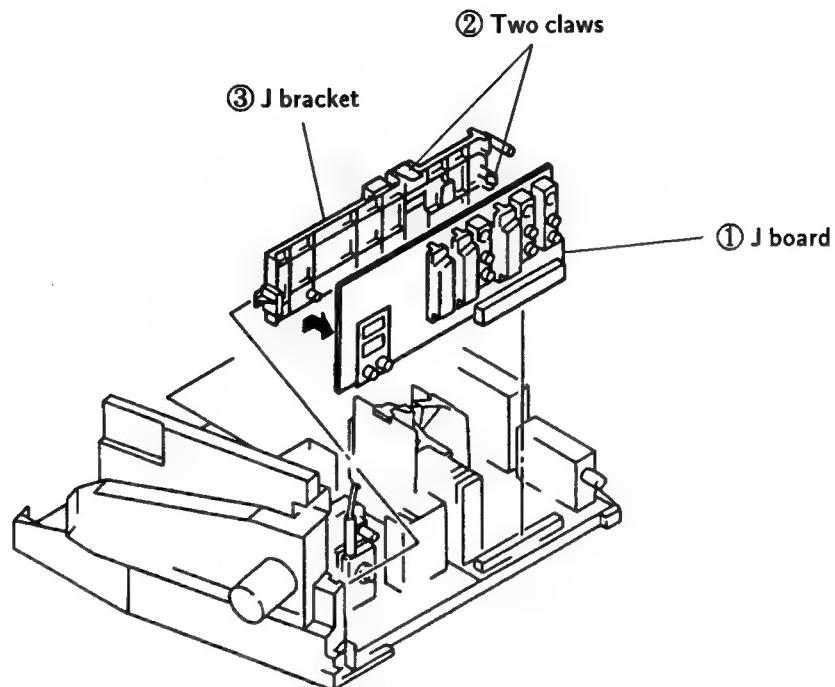
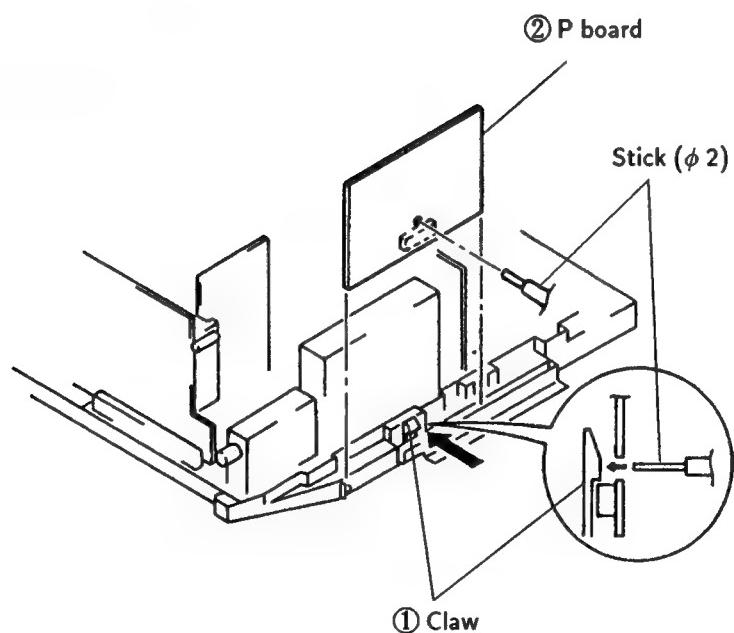


2-7. EXTENSION BOARD



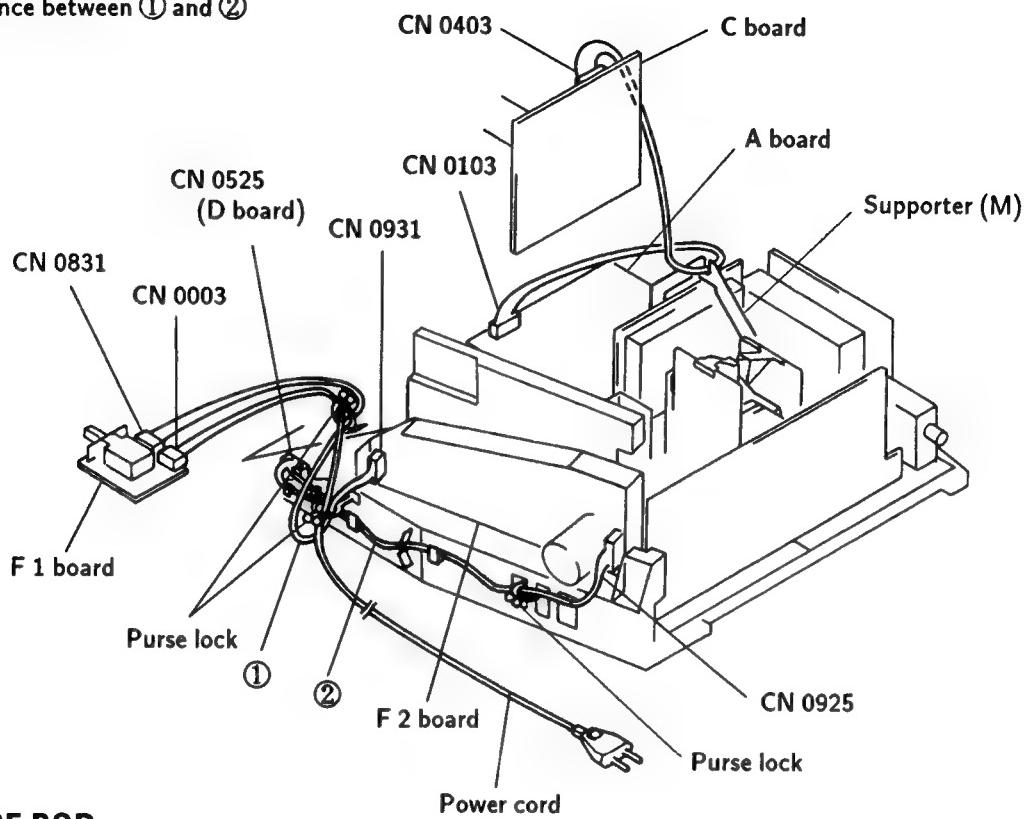
2-8. F BRACKET REMOVAL



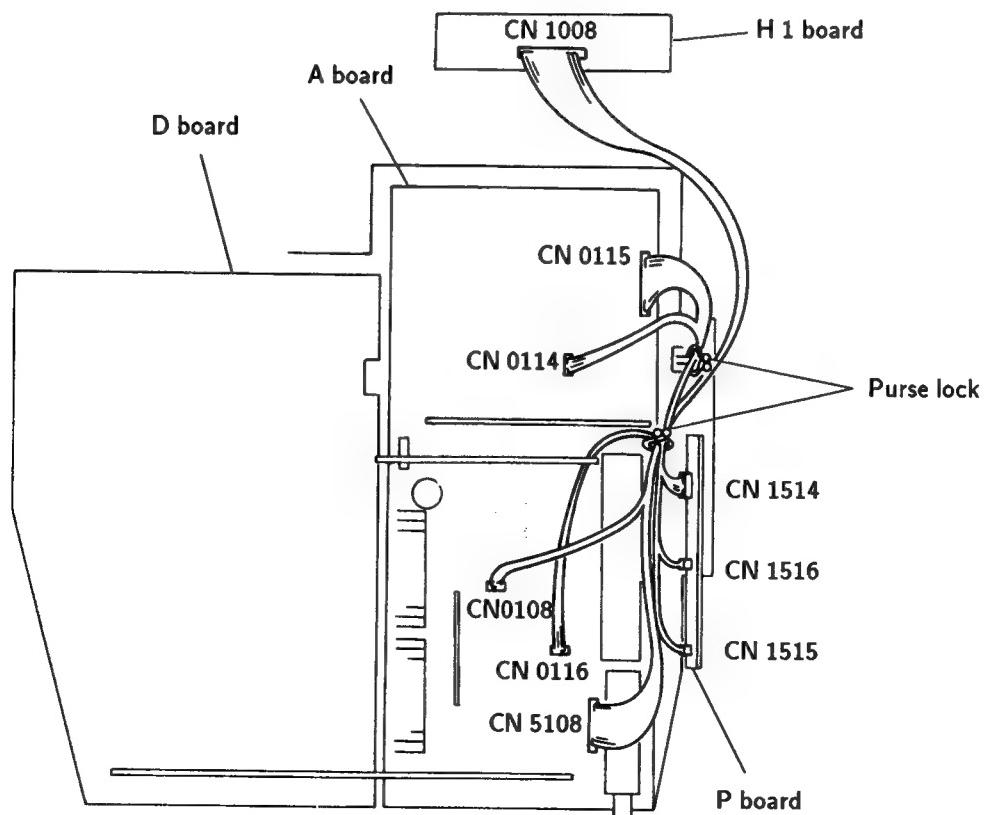
2-9. J BOARD REMOVAL**2-10. P BOARD REMOVAL**

2-11-1. WIRE ROD

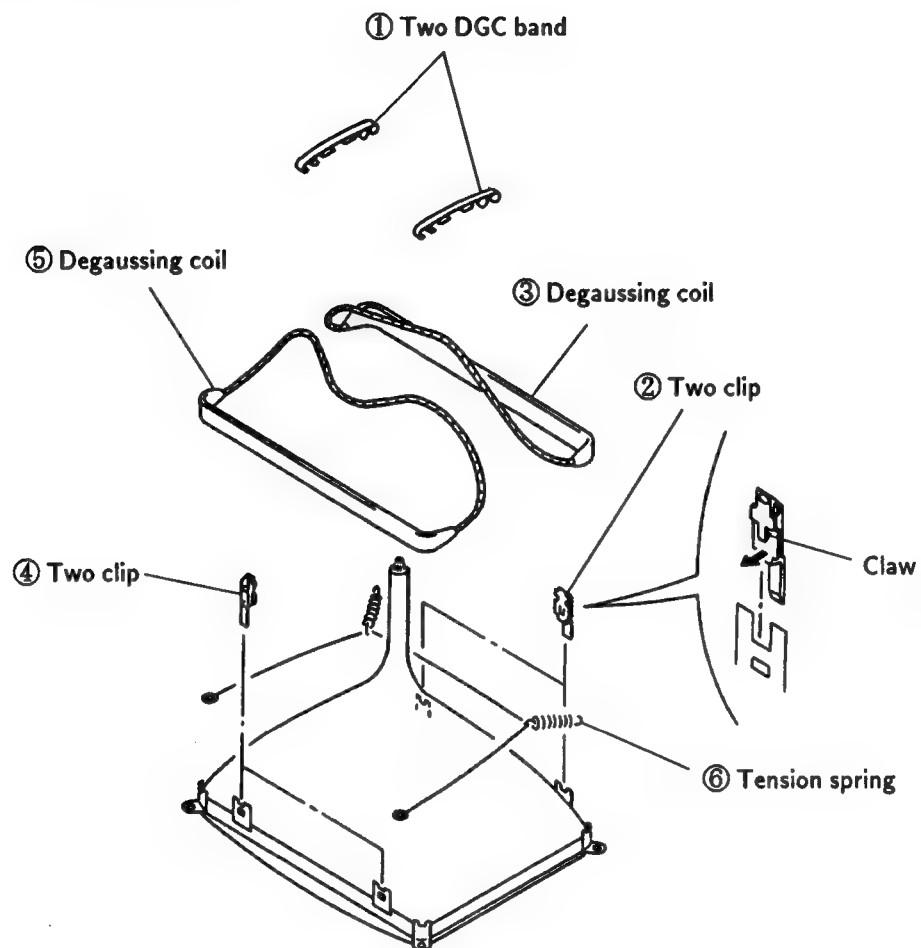
※ Keep distance between ① and ②



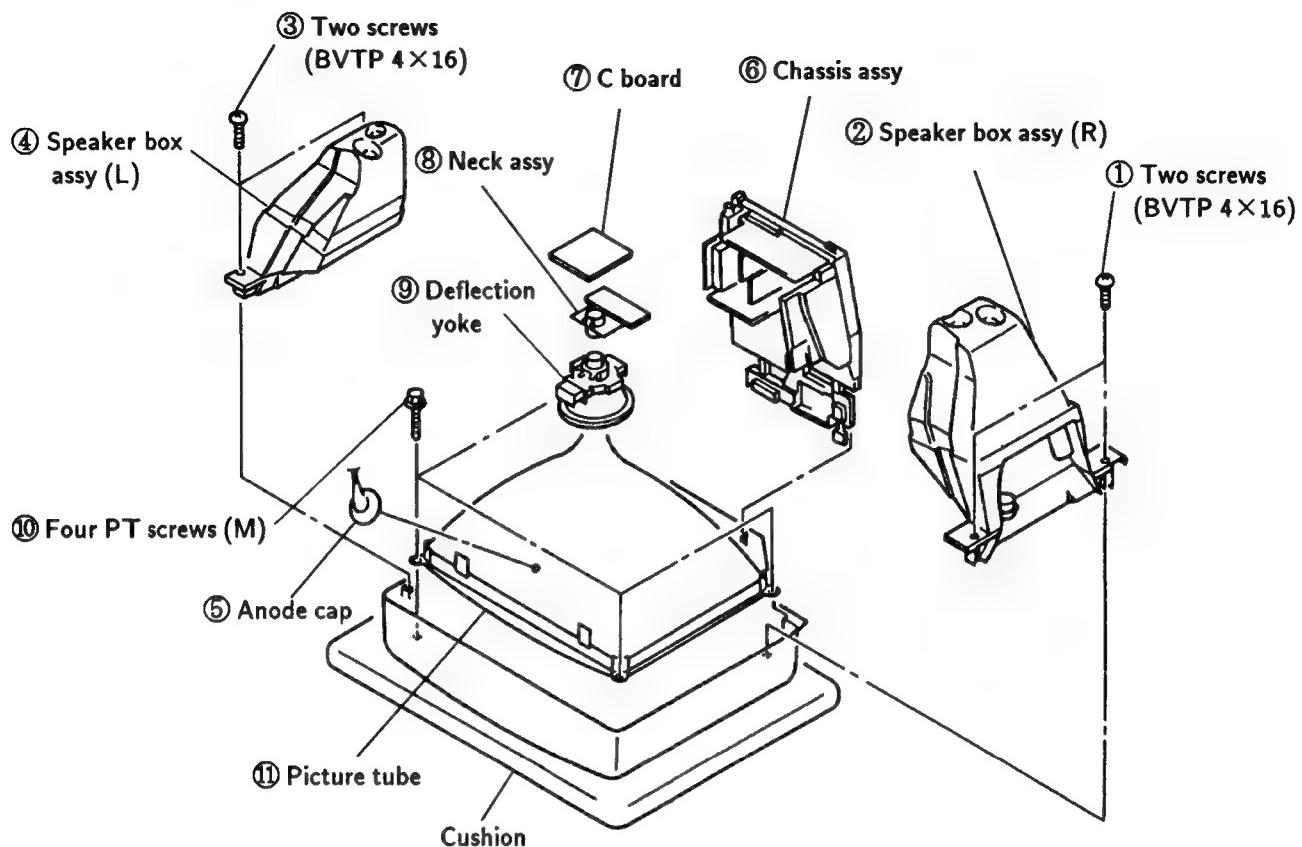
2-11-2. WIRE ROD



2-12. DEGAUSSING COIL REMOVAL



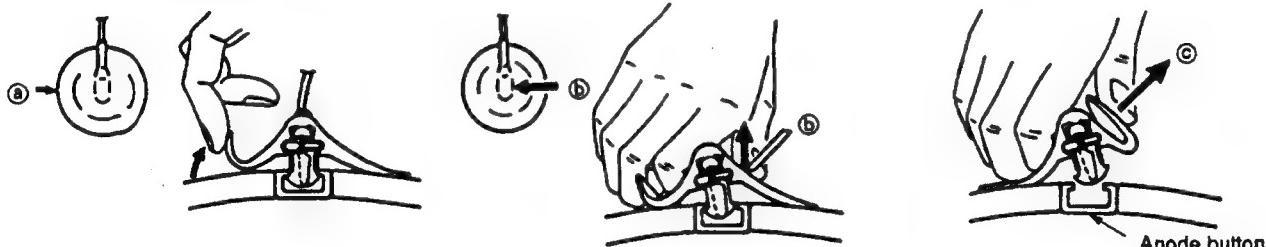
2-13. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

NOTE : Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

• REMOVING PROCEDURES



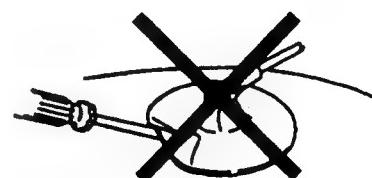
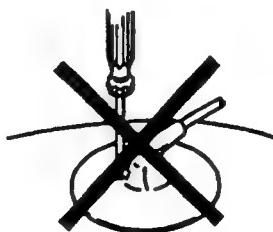
① Turn up one side of the rubber cap in the direction indicated by the arrow ①.

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ③.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly!
The shatter-hook terminal will stick out or hurt the rubber.



SECTION 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there is specific instruction to the contrary, carry out these adjustments with the rated power supply.
- Unless there is specific instruction to the contrary, set the controls and switches this way :
 - Contrast 80% (or remote control normal)
 - Brightness 50%

Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
 Contrast } normal
 Brightness }
2. Position neck assy as shown in Fig.3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side. (See Fig.3-1 - 3-3)
5. Move the deflection yoke forward and adjust so that entire screen is red. (See Fig.3-1)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Fig.3-4)

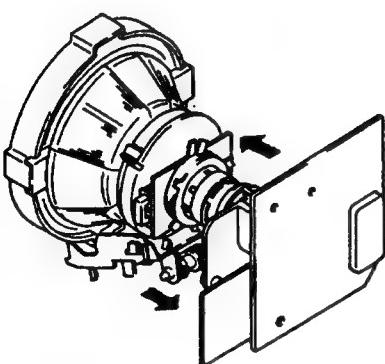


Fig.3-1

● Carry out the following adjustments in this order :

1. Beam landing
2. Convergence
3. Focus
4. White balance

Note: Testing equipment required.

1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

Fig.3-2

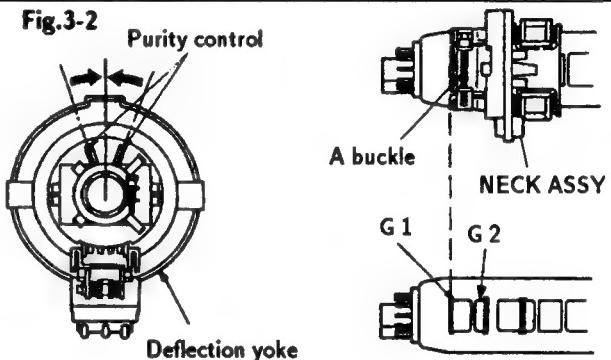


Fig.3-3

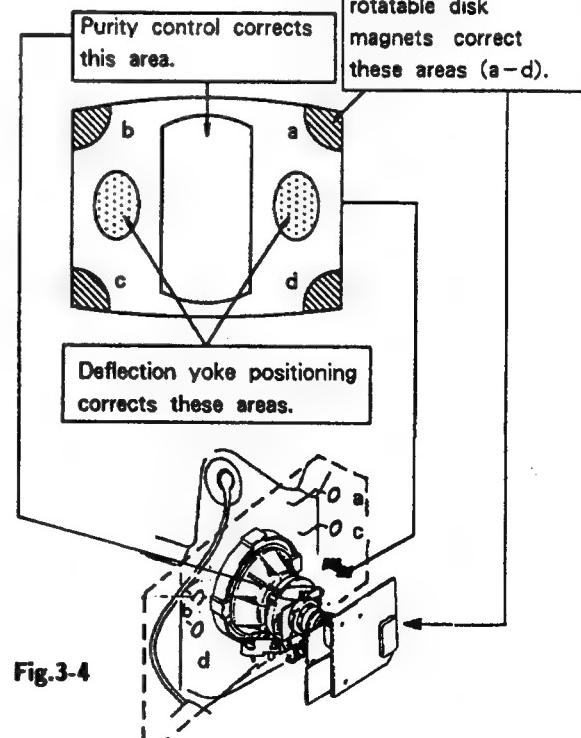
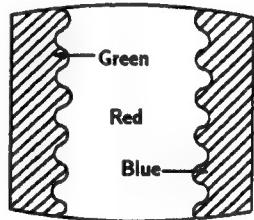


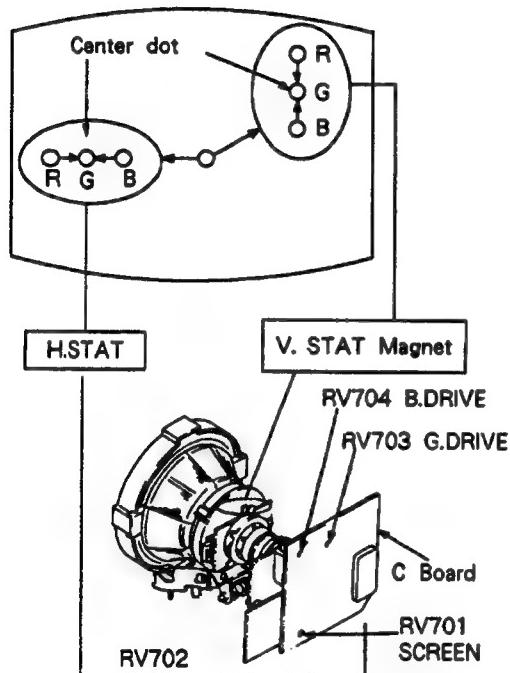
Fig.3-4

3-2. CONVERGENCE

Preparations :

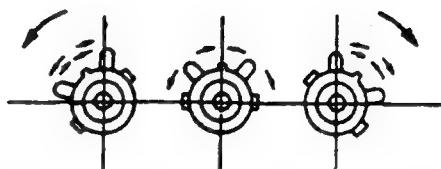
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

(1) Horizontal and vertical static convergence

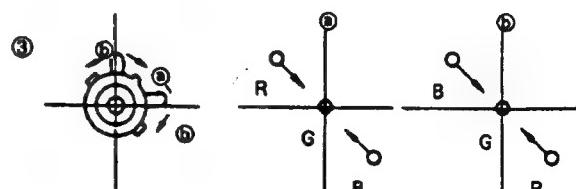
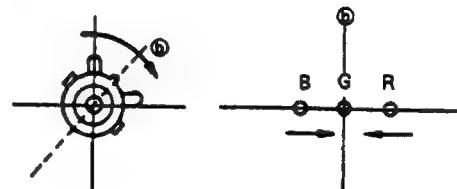
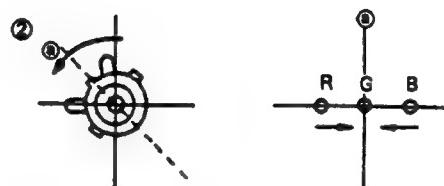
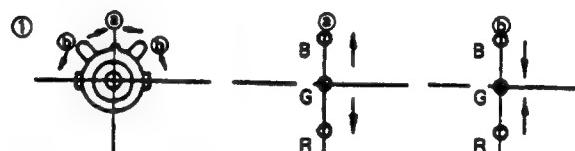


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

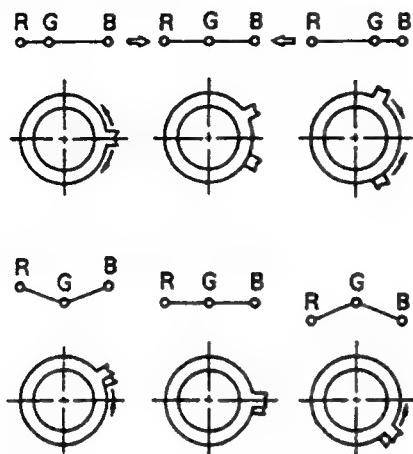
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



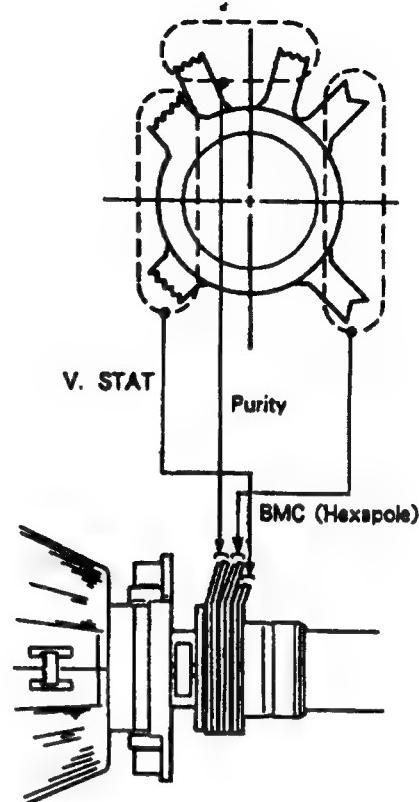
4. If the V.STAT magnet is moved in the direction of the ① and ② arrows, the red, green, and blue points move as shown below.



- Operation of BMC (Hexapole) Magnet



- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking.
Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).



(2)Dynamic convergence adjustment

1. Adjust horizontal convergence located at the center position of the screen with H STAT VR.
2. Enter into service mode. (Refer to the section 2 "Electrical Adjustment" on how to enter service mode.)
3. Select CXA 1526 on menu.
4. Select each item and adjust them so that each item attains optimal convergence.
5. Press **OK** button to write the data.

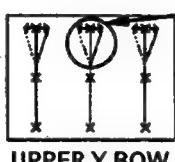
CXA 1526

Item No.	Adjustment item	Data Amout
01	DC SHIFT	32
02	UPPER Y BOW	4
03	LOWER Y BOW	5
04	H AMP	48
05	H TILT	29
06	UPPER COR BOW	32
07	UPPER TILT	
08	LOWER COR BOW	32
09	LOWER TILT	32

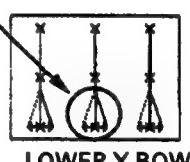
R.G.B.dots movement on the screen of the set



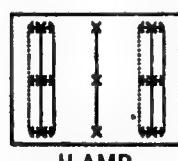
Fine adjustment of H STAT



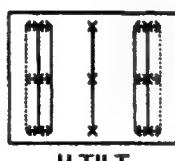
Adjustment of Y BOW of the upper section of the screen.



Adjustment of Y BOW of the lower section of the screen.



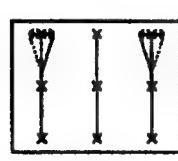
H AMP adjustment



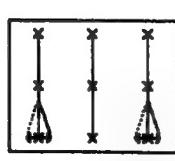
H TILT adjustment



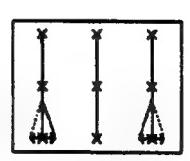
Adjustment of C BOW of the upper section of the screen.



Adjustment of TILT of the upper section of the screen.



Adjustment of C BOW of the lower section of the screen.



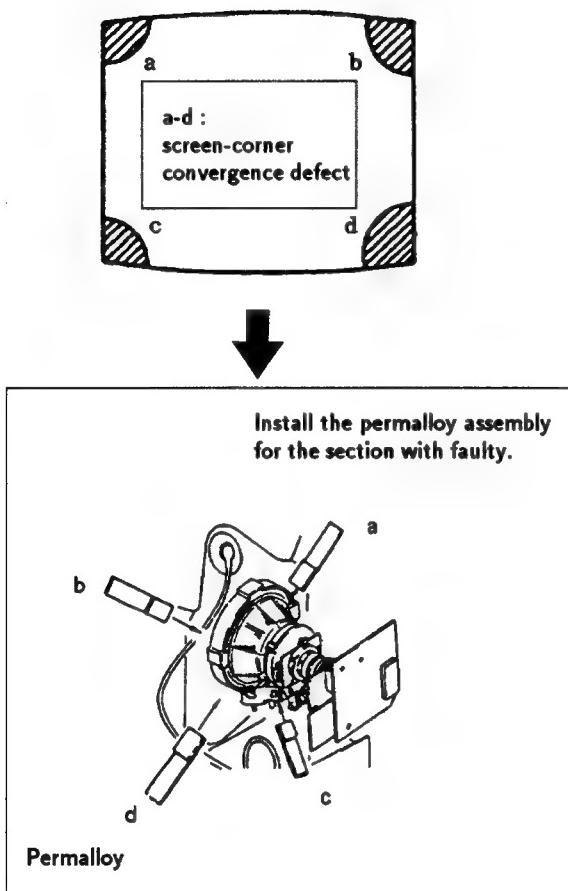
Adjustment of TILT of the lower section of the screen.

At this time, H.TILT, H.AMP, UPPER TILT, UPPER COR, BOW, LOWER TILT, and LOWER COR, BOW look like all the same, but the movement of the

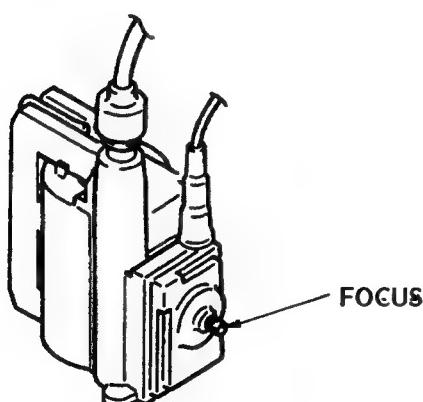
right and left dots are reverse in all the TILT system.
(Pay attention to the dotted lines.)

(4) Screen corner convergence

If you cannot adjust corner convergence properly, correct them with permalloy.

**3-3. FOCUS**

Adjust the focus to optimize the screen.

**3-4. WHITE BALANCE****Screen G2 Setting**

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 180V DC to the R,G, and B cathodes with an external power supply.
4. While watching the picture, adjust G 2 control RV 701 (Screen) to the point just before the return lines disappear.

White balance adjustment

1. Receive all-white signal.
2. Enter into service mode. (Refer to the section 4 "Electrical Adjustment" to how to enter service mode.)
3. Select CXA 1587S on menu.

CXA 1587S

Item No.	Adjustment item	Data amount
09	SUB BRIGHT	ADJ.
10	SUB HUE	7
11	VM LEVEL	2
12	NR LEVEL	0
13	ABL MODE	0
14	G-DRIVE	ADJ.
15	B-DRIVE	ADJ.
16	G-AUTO CUT OFF	ADJ.
17	B-AUTO CUT OFF	ADJ.
18	R-MANUAL CUT OFF	ADJ.
19	G-MANUAL CUT OFF	ADJ.
20	B-MANUAL CUT OFF	ADJ.

4. Set picture to MAX.
5. Adjust G-DRIVE B-DRIVE with buttons so that the white balance becomes optimum.
6. Press **OK** button to write the data for each item.
7. Set picture to MIN.
8. Adjust G-AUTO CUT OFF, B-AUTO CUT OFF, R -MANUAL CUT OFF, G-MANUAL CUT OFF and B-MANUAL CUT OFF with buttons so that the white balance becomes optimum.
9. Press **OK** button to write the data for each item.

SECTION 4 CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied remote commander, RM-832.

HOW TO ENTER INTO SERVICE MODE

1. Turn on the main power switch of the set while pressing any two buttons on the front panel.

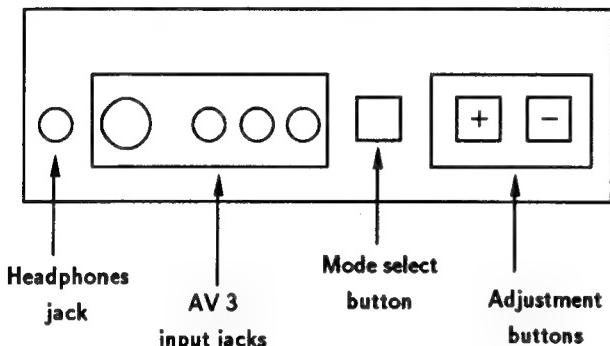


Fig.4-1

2. "TT" will appear on the upper right corner of the screen.

Command operation in service mode

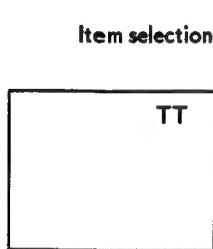


Fig.4-2

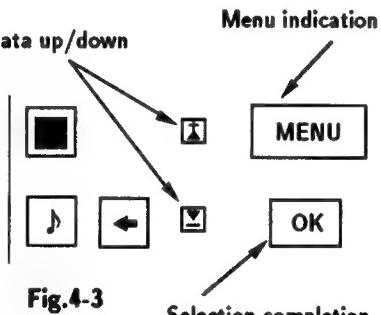


Fig.4-3

3. Press the **MENU** button of the commander to get the menu on screen.

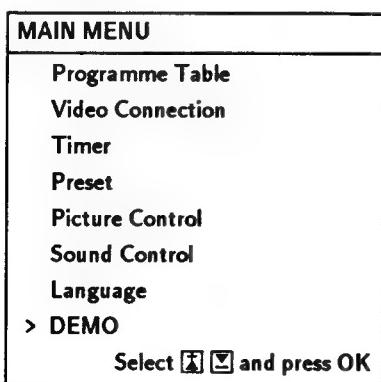


Fig.4-4

4. Press the **[]** and **[]** buttons of the commander and move **>** to DEMO.
5. Press **OK** button to proceed to the next menu.
6. The menu of fig.4-5 will appear on screen. Select DEVICE corresponding to the adjustment item from the table on next page.

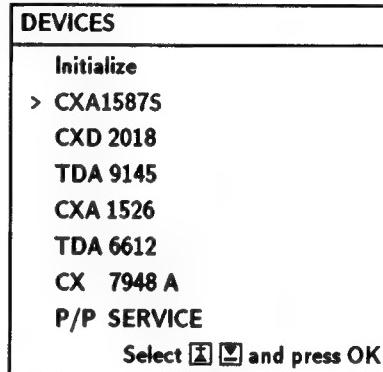


Fig.4-5

7. If adjustment item is CXA1587S, press the **[]** button and move **>** to CXA1587S.

CXA 1587 S

Item No.	Adjustment item	Data Amout
01	PICTURE	53
02	COLOR	31
03	BRIGHT	31
04	HUE	31
05	SHARPNESS	7
06	RGB PICTURE	13
07	SUB CONTRAST	ADJ.
08	SUB COLOR	ADJ.
09	SUB BRIGHT	ADJ.
10	SUB HUE	7
11	VM LEVEL	2
12	NR LEVEL	0
13	ABL MODE	0
14	G-DRIVE	ADJ.
15	B-DRIVE	ADJ.

8. Press **OK** button to get the next selection menu.
9. Press **[]** button and move **>** to the adjustment item and press **OK** button.
10. Press the **[]** and **[]** buttons to change the data in order to comply each standard.
11. Press **OK** button to write data.
12. Turn off the power to quit service mode when completing the adjustment.

CXA 1587 S

Item No.	Adjustment item	Data Amount
01	PICTURE	53
02	COLOR	31
03	BRIGHT	31
04	HUE	31
05	SHARPNESS	7
06	RGB PICTURE	13
07	SUB CONTRAST	ADJ.
08	SUB COLOR	ADJ.
09	SUB BRIGHT	ADJ.
10	SUB HUE	7
11	VM LEVEL	2
12	NR LEVEL	0
13	ABL MODE	0
14	G-DRIVE	ADJ.
15	B-DRIVE	ADJ.
16	G-AUTO CUT OFF	ADJ.
17	B-AUTO CUT OFF	ADJ.
18	R-MANUAL CUT OFF	ADJ.
19	G-MANUAL CUT OFF	ADJ.
20	B-MANUAL CUT OFF	ADJ.
21	GAMMA LEVEL	0
22	DC TRANSFER RATIO	3
23	DINAMIC PICTURE	0
24	Y FILTER ADJ	ADJ.
25	Y DELAY TIME	15
26	Y DELAY SWITCH 1	0
27	Y DELAY SWITCH 2	1
28	SHARPNESS LIMIT	ON
29	ALL BLK	OFF
30	H SHIFT	32
31	DAC TEST	ON
32	PRE/OVER SHOOT	7
33	SHARPNESS FO	2
34	SUB SHARPNESS	3
35	R MUTE	OFF
36	G MUTE	OFF
37	B MUTE	OFF

CXA 1526

Item No.	Adjustment item	Data Amount
01	DC SHIFT	32
02	UPPER Y BOW	4
03	LOWER Y BOW	5
04	H.AMP	48
05	H TILT	29
06	UPPER COR BOW	32
07	UPPER TILT	32
08	LOWER COR BOW	32
09	LOWER TILT	32

38	AGING 1	OFF
39	AGING 2	OFF
40	AKB OFF	ON
41	INHIBIT RGB	OFF
42	FORCED RGB	OFF
43	V/2 V	OFF
44	AXIS	PAL
45	HUE SW	OFF
46	V EXTENTION	OFF
47	AFC1	1
48	AFC2	0
49	AFC OFF	ON
50	REF.POSITION	0

CXD 2018

Item No.	Adjustment item	Data Amount
01	V SIZE	ADJ.
02	V SHIFT	ADJ.
03	S CORRECTION	ADJ.
04	V LINEARITY	ADJ.
05	H SIZE	ADJ.
06	PIN AMP	ADJ.
07	TILT	ADJ.
08	UPPER CORNER	ADJ.
09	LOWER CORNER	ADJ.
10	V BOW	ADJ.
11	ANGLE	ADJ.
12	HV COMP.V	13
13	HV COMP.H	8
14	FRAME SHIFT	OFF
15	FREE RUN 60 Hz	OFF
16	SYSTEM 60 Hz	OFF
17	ASPECT WIDE	OFF
18	DOUBLE SCAN	OFF
19	INTERLACE	ON
20	H SHIFT	32
21	N/S CORRECTION	ADJ.

Typical Value (OSD based)when receiving PAL Philips pattern.

TDA 6612

Adjustment item	Data Amount
Stereo-Separation	30

Should be adjusted twice 4 : 3 and 16 : 9 mode.

Y FILTER ADJUSTMENT

1. Input PAL RED pattern.
2. Connect an oscilloscope to CN 0403 ① pin (R OUT) on the C board.
3. Enter into service mode and press 3, 8.
4. Adjust data by Δ or ∇ to minimize the chroma element of CN 0403 ① pin.

STEREO-SEPARATION ADJUSTMENT

1. Input 1 kHz stereo signal to the L-ch and 400 Hz stereo signal to the R-ch.
2. Enter into service mode and press 19.
3. Adjust data so that sound does not leak to the R-ch and the L-ch.

SUB BRIGHTNESS ADJUSTMENT

1. Input Phillips pattern.
2. Enter into service mode and press 23.
3. Adjust data so that 0-IRE of the grey scale and CUT-OFF 20-IRE glitter slightly.

DRIVE AND CUT OFF

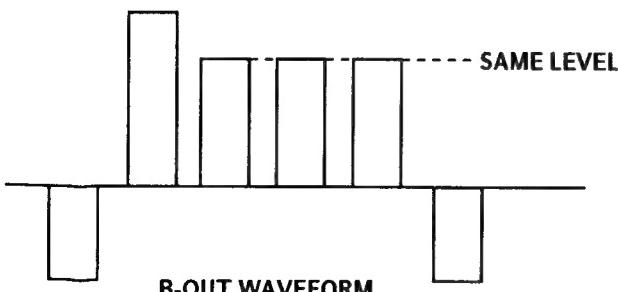
See direct test mode list attached and refer to sub brightness or such for adjustment method.

SUB CONTRAST ADJUSTMENT

1. Input a video that contains small 100% area on the Black Back ground.
2. Enter into service mode and press 01 to have PIC max followed by 21.
3. Adjust data so that 2.5 Vp-p can be obtained at ① CN 0403 (R out).

SUB COLOR ADJUSTMENT

1. Input PAL color bar.
2. Connect an oscilloscope to CN 0403 ③ pin (B OUT) on the C board.
3. Enter into service mode and press 22 of CXA1587S, 8 SUB COLOR.
4. Adjust data so that the right sides of the waveform will be the same.

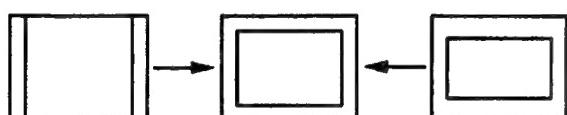
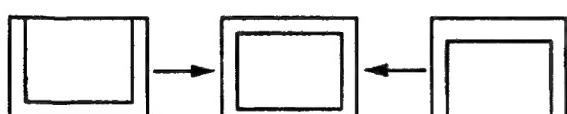
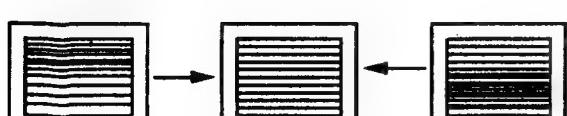
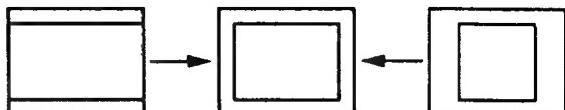
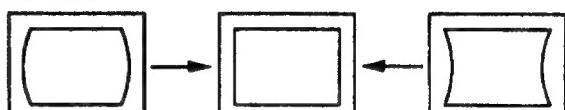
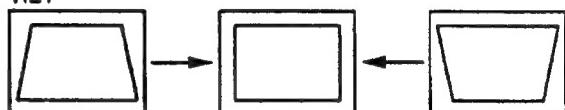
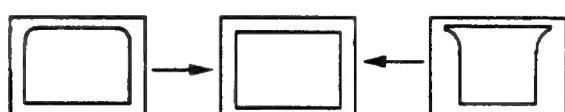
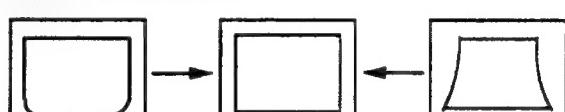
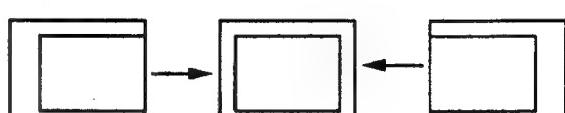


DEFLECTION SYSTEM ADJUSTMENT

1. Enter into service mode and select CXD 2018.
2. Select and adjust each item in order to get an optimum image.

CXD 2018

Item No.	Adjustment item	Data Amount
01	V SIZE	ADJ.
02	V SHIFT	ADJ.
03	S CORRECTION	ADJ.
04	V LINEARITY	ADJ.
05	H SIZE	ADJ.
06	PIN AMP	ADJ.
07	TIILT	ADJ.
08	UPPER CORNER	ADJ.
09	LOWER CORNER	ADJ.
10	V BOW	ADJ.
11	ANGLE	ADJ.
12	HV COMP.V	13
13	HV COMP.H	8
14	FRAME SHIFT	OFF
15	FREE RUN 60 Hz	OFF
16	SYSTEM 60 Hz	OFF
17	ASPECT WIDE	OFF
18	DOUBLE SCAM	OFF
19	NON INTERLACE	ON
20	H SHIFT	32
21	N/S CORRECTION	ADJ.

V SIZE**V SHIFT****S CORRECTION****V LINEARITY****H SIZE****PIN AMP****TIILT****UPPER CORNER PIN****LOWER CORNER PIN****V BOW****ANGLE****H SHIFT****N/S CORRECTION**

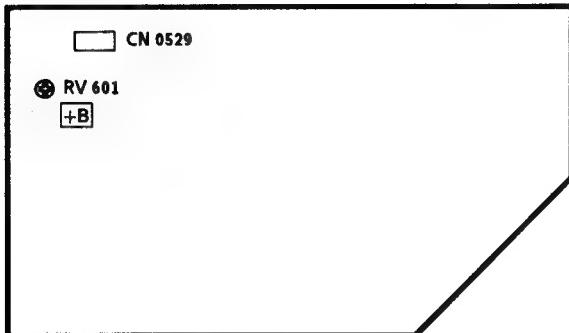
3. Press **OK** button to write the data.

If menu display may disturb the adjustment press **OK** to clear, to resume it, press **OK** again.

4-2. VOLUME ELECTRICAL ADJUSTMENTS

+B (+135 V) ADJUSTMENT (RV 601)

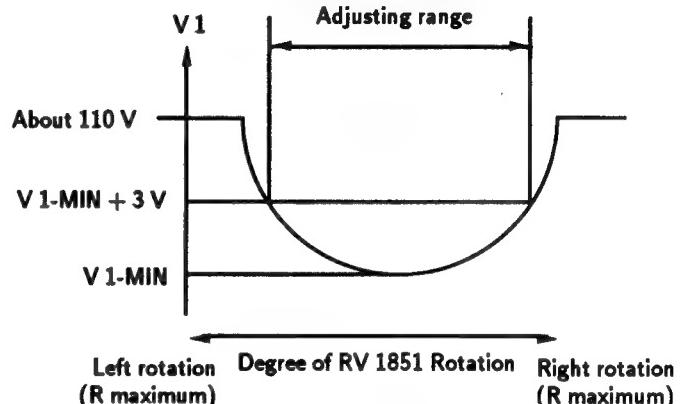
D BOARD



1. Turn on the power of the TV set.
2. Connect a digital multi-meter to ① pin of CN 0529 on D board.
3. Adjust RV 601 on D board to $+135 \pm 0.5$ V.

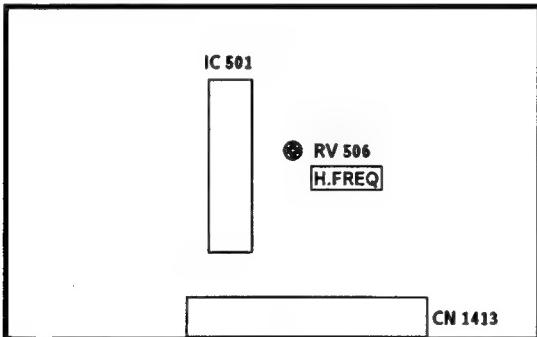
DRIVE PULSE PHASE ADJUSTMENT (RV 1851)

- 1) While measuring the voltage V 1 at both edges of C 1859, rotate RV 1851 so that it becomes minimum. The adjusting range is from (the voltage at which V 1 becomes minimum) V 1 MIN to 3 V, which means, adjust to between V 1 MIN to V 1 MIN + 3 V.



H.FREQ ADJUSTMENT (RV 506)

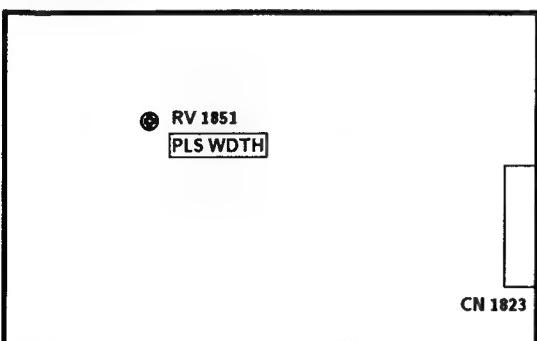
M BOARD



1. Connect GND to ⑫ pin of IC 501 on M board.
2. Connect a frequency counter to ④ pin of IC 501.
3. Adjust RV 506 on M board to $15,625 \text{ kHz} \pm 10 \text{ Hz}$.
4. Remove ⑫ pin of IC 501 from GND.

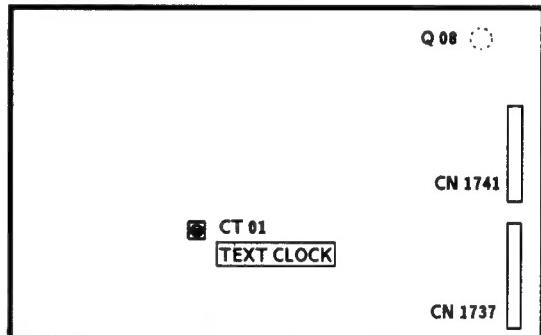
PLS WDTH

D 2 BOARD



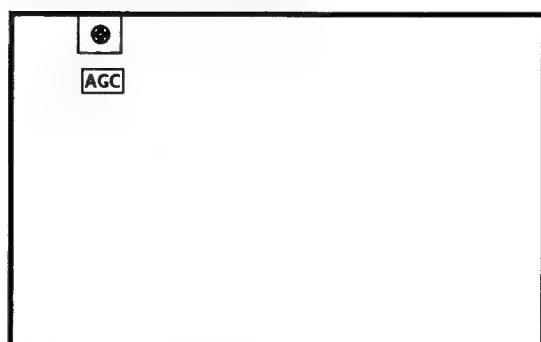
TEXT CLOCK ADJUSTMENT (CT 01)

V BOARD



1. Get TEXT MENU on screen.
2. Connect GND and the base of Q 08 on V board.
3. Adjust CT 01 on V board so that the MENU stands still as much as possible.

AGC ADJUSTMENT (IF BLOCK)



1. Receive off-air signal.
2. Adjust AGC VR so that there is no snow noise and cross-modulation.
3. Change receiving channel and confirm status.

4-3. TEST MODE 2 :

Is available by pressing Test button two times, OSD "TT" appears. The functions described bellow are available by pressing the two numbers. To release the Test Mode 2, press two times 0, or switch TV in Standby Mode.

00	switch Test Mode 2 off
01	picture maximum
02	picture minimum
03	Volume 35%
04	Volume 50%
05	Volume 65%
06	Volume 80%
07	Aging Condition (Volumin., Picture max., Brightness max., Aging 2 Mode of CXA 1587S, TDA 2595 is locked to CXA 1587S via PIN 34 of μ -Con.)
08	Shipping Condition (Analog Values are RESET due to factory setting, Prog 1 is selected, TT Mode is switched off)
09	dummy
10	Tenth entry is deleted
11	Balance
12	Hue
13-14	dummy
15	Read factory setting from NVM Reads Volume, Balance, Treble, Bass, Brightness, Contrast, Hue, Sharpness, Colour values from ROM to the actual used values (Last Power Memory)
16	Save actual used values as RESET values Memorize actual used values Balance, Treble, Bass, Hue, Sharpness at RESET position in NVM
17	Preset Lavel for AV Sources
18	dummy
19	Stereo Separation
20	Tenth entry is deleted
21	Sub Contrast
22	Sub Colour
23	Sub Brightness
24-29	dummy

30	Tenth entry is deleted
31	Green Drive
32	Blue Drive
33	Green Cut Off (Auto Cut Off)
34	Blue Cut Off (Auto Cut Off)
35	Red Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
36	Green Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
37	Blue Cut Off (Manual Cut Off) (Auto Cut Off is switched off)
38	Y-Filter adjustment (Trap is switched off and TDA 9145 is switched in forced NTSC Mode)
39	dummy
40	Tenth entry is deleted
41	Default setting of CXA 1587S (Only in Plog 99 available)
42	Default setting of CXA 2018 (Only in Plog 99 available)
43	Default setting of CXA 1526 (Only in Plog 99 available)
44	(all Port High) Not yet
45	(all Port High) Not yet
46-48	dummy
49	Erase the NVM Testbyte (this byte detects already stored NMV's) After selecting this function, switch TV Off and On → the NVM will be preset by μ -Controller. (Not the channel data)

Note : For No. 35, 36, 37 and 38 special pressing (AKB, forced Color Mode, Trap) is selected. After selecting a new Test Mode Number, the AKB is switched ON, the Trap is switched On and TDA 9145 is switched to Auto Search Mode.

In Test Mode 2 the Menu display is switchable by Speaker-Off button.

4-4. ERROR MESSAGE

Self diagnosis system can operate as follows.

- When MP can't get the acknowledgement back from the device, LED starts flashing according to the table as attached.

In case of more errors in parallel, the blinking error shows max. Priority according to the error number (e.g. error 2 and error 5 appear together, then LEDs show error 2).

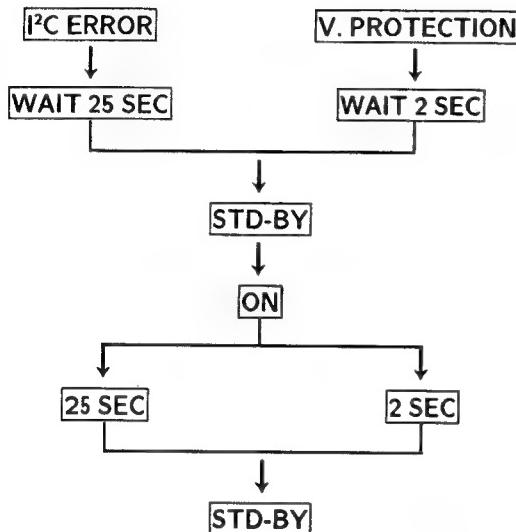


TABLE OF ERRORS

ERROR COUNT	IC TYPE	FUNCTION
1	I ² C BUS	SDA low
2	X 24 C 16	EEPROM
3	SDA 3202	Tuner PII
4	TDA 9145	Colour decoder
5	CXA 1587S	RGB/Jungle
6	TDA 6612	Sound processor
7	CXD 2018	V deflection
8	CXA 1545	AV switch
11	SDA 5248	Text
13		V protection

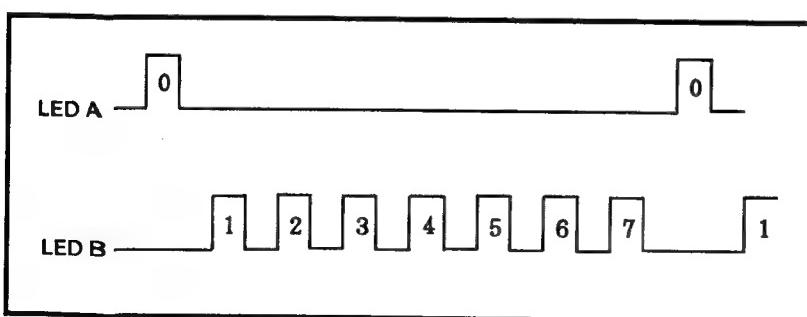
Stand by LED blinking

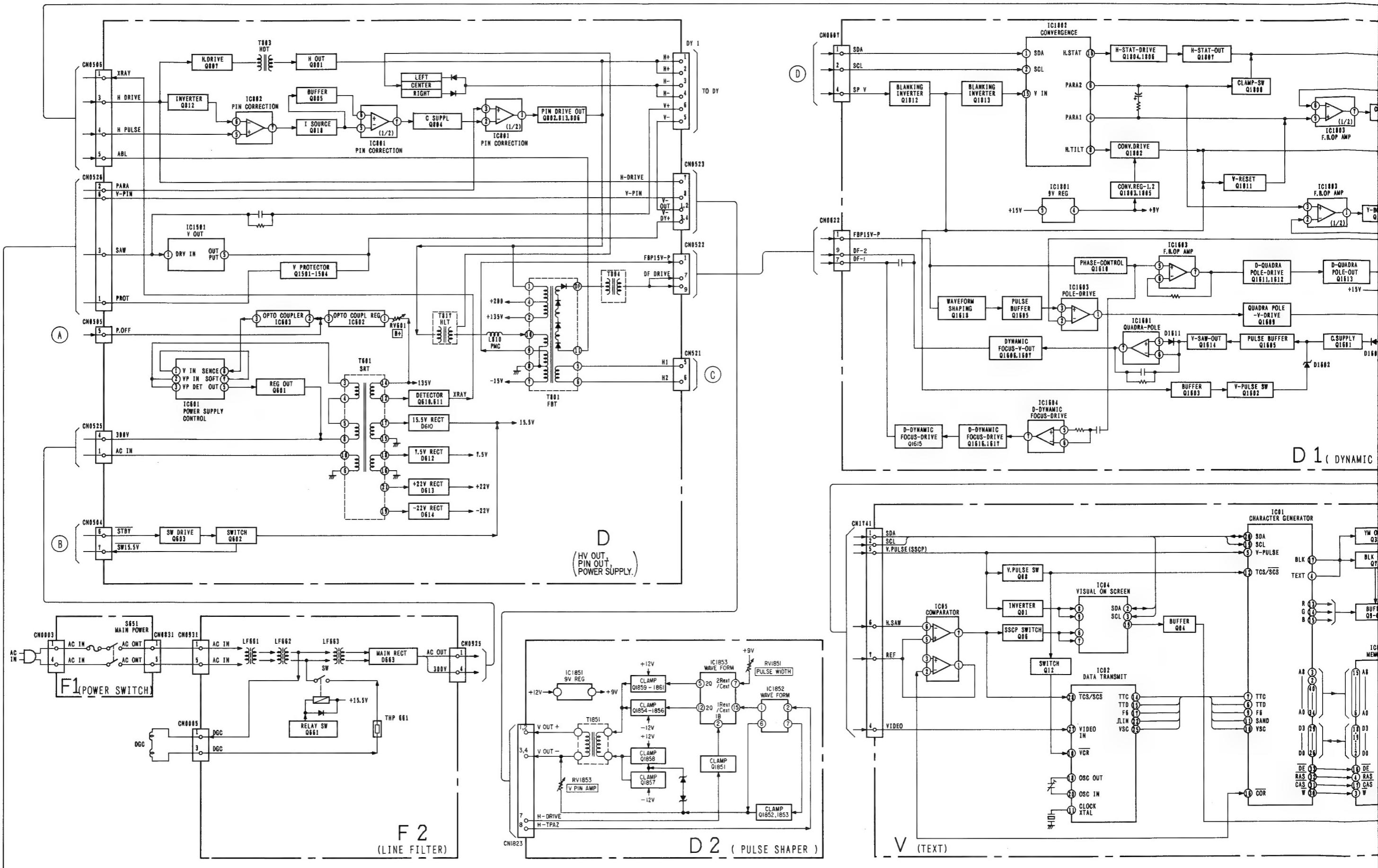
No IK return

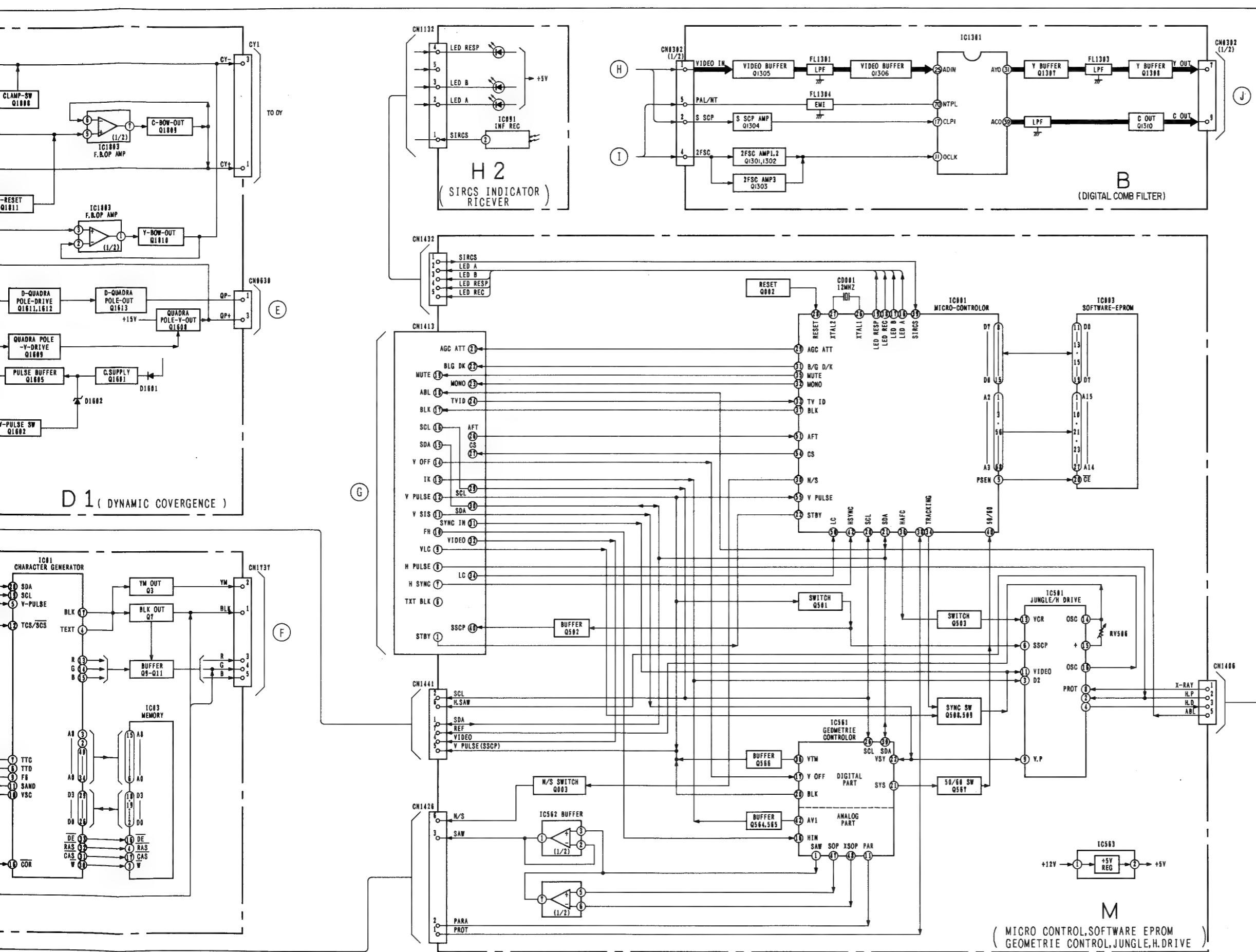
4-5. ERROR I²C BUS DIAGNOSIS SYSTEM IN AE 2 CHASSIS

For all ICs in AE 2 chassis which are necessary to get picture and sound there is a built-in error I²C Bus diagnosis system.

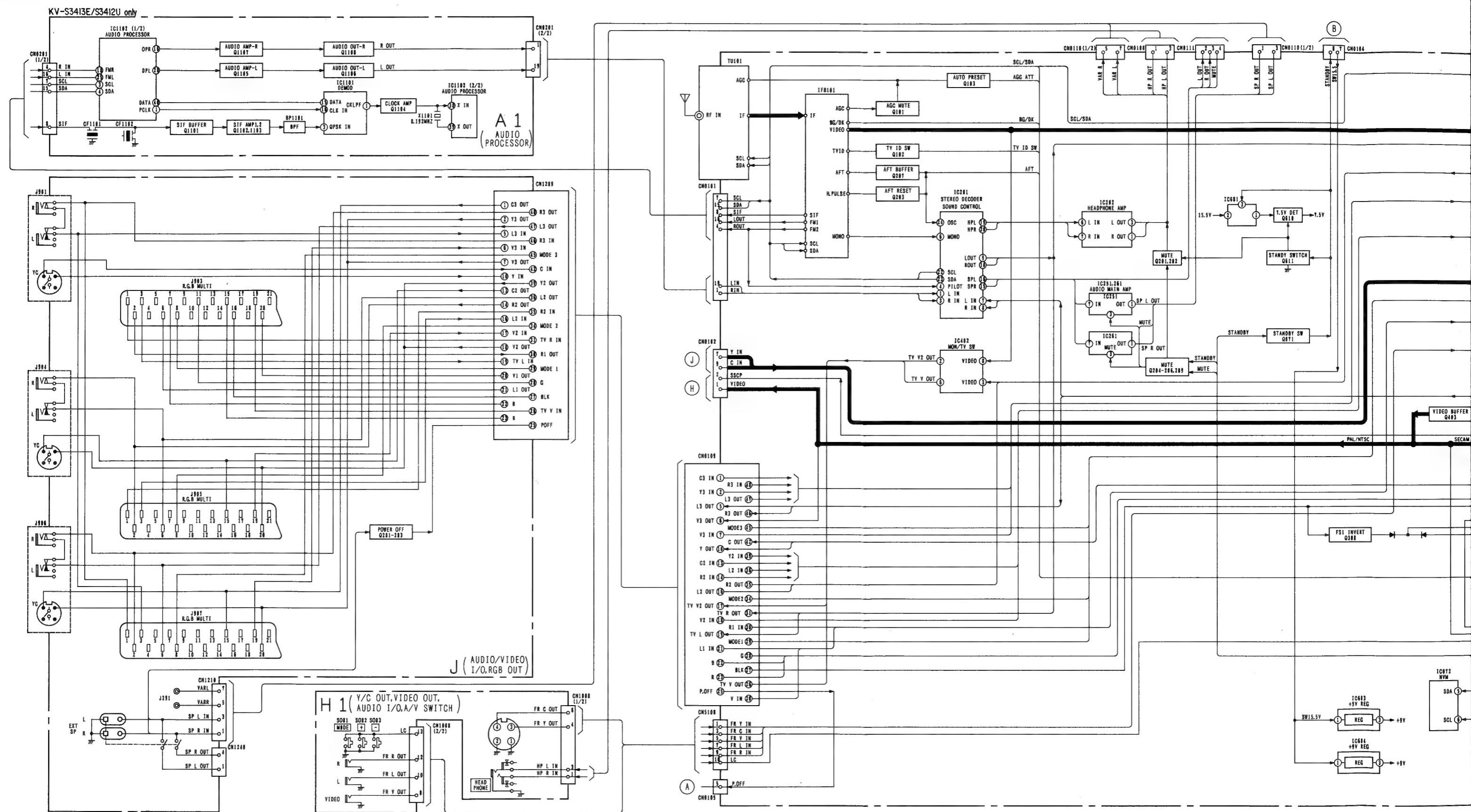
In case of no acknowledge bit, LED A and LED B start blinking as shown.

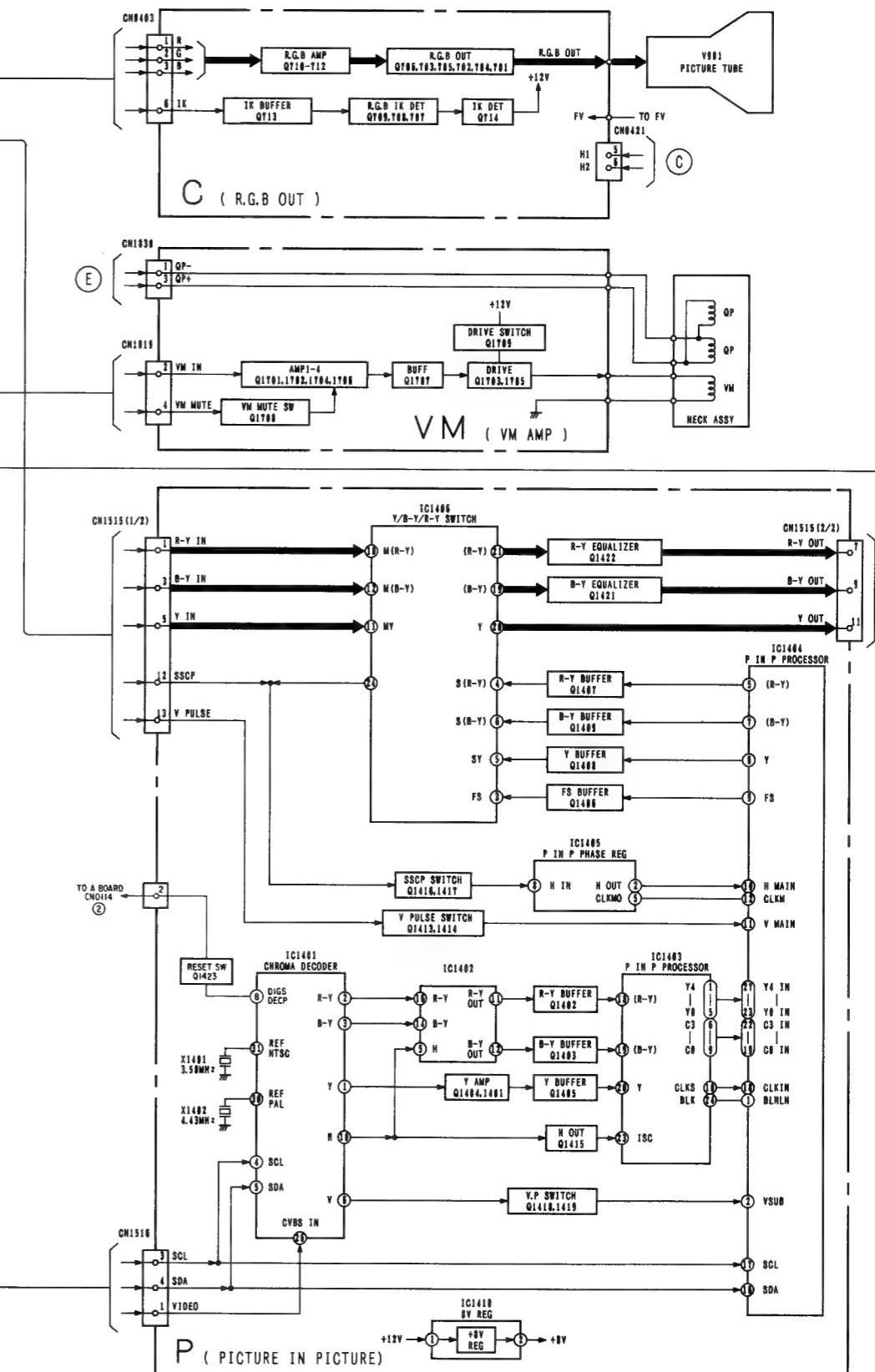
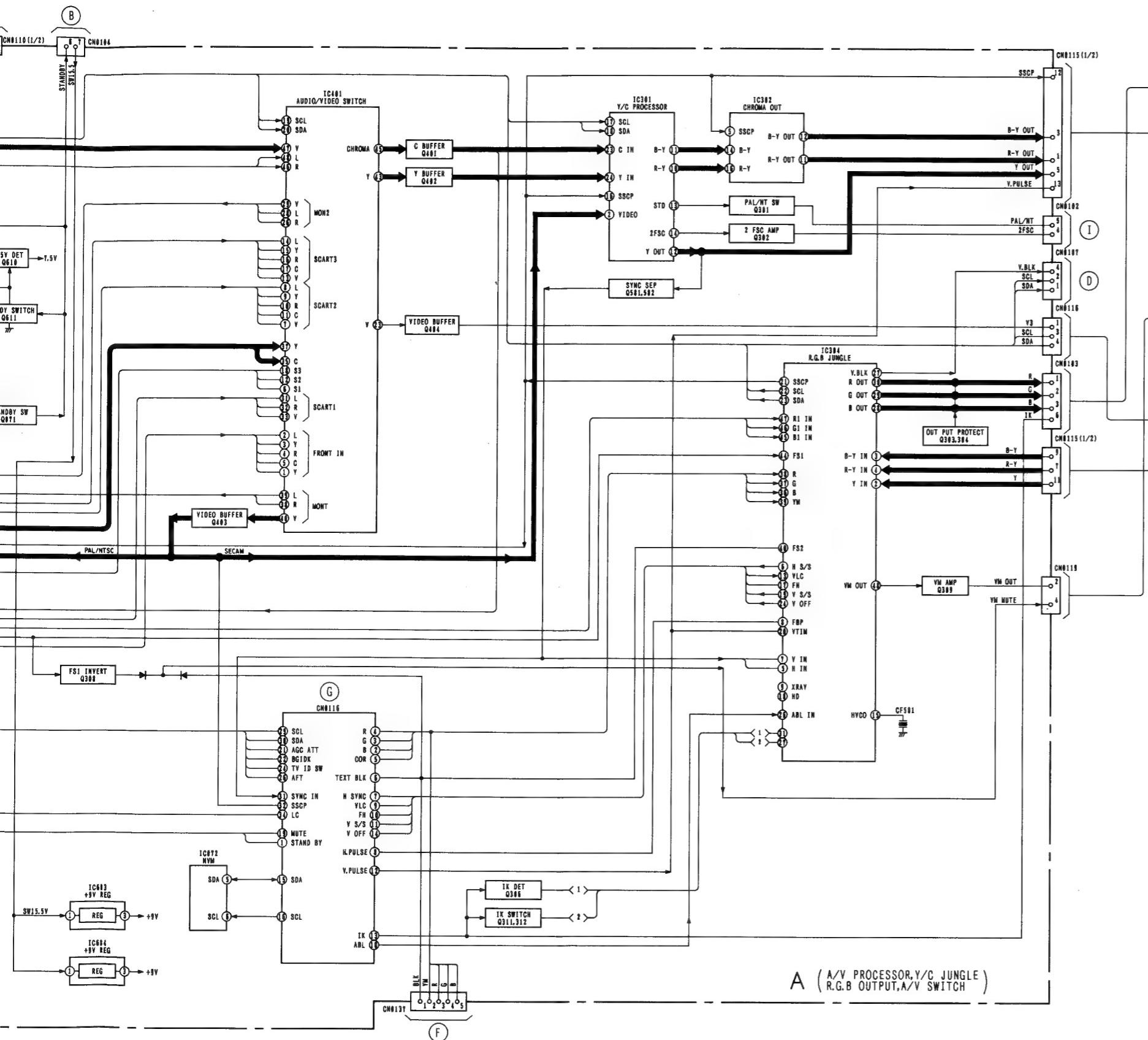


**SECTION 5
DIAGRAMS**
5-1. BLOCK DIAGRAM (1)

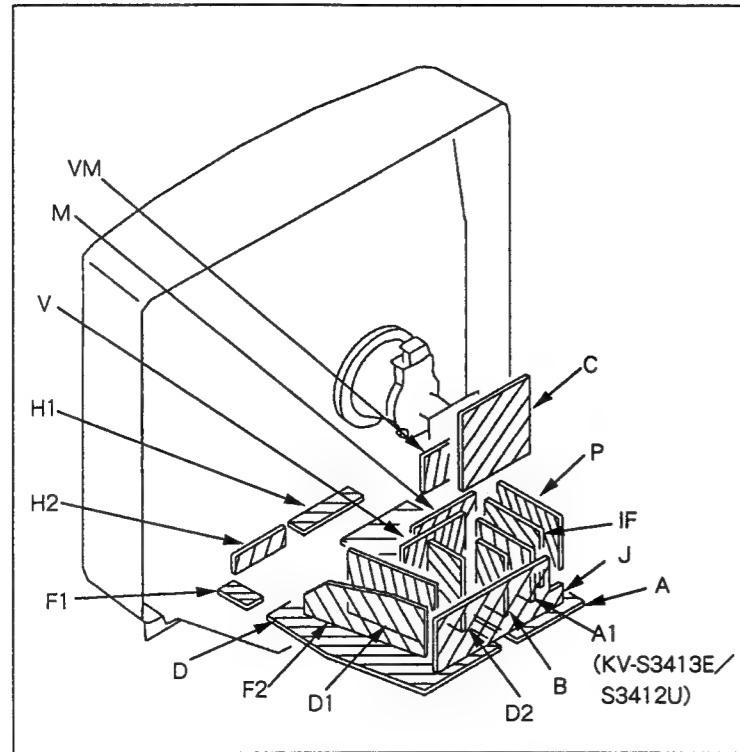


5-2. BLOCK DIAGRAM (2)





5-3. CIRCUIT BOARDS LOCATION



Reference information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
FPRD		: NONFLAMMABLE CARBON
FUSE		: NONFLAMMABLE FUSIBLE
RS		: NONFLAMMABLE METAL OXIDE
RB		: NONFLAMMABLE CEMENT
RW		: NONFLAMMABLE WIREWOUND
*		: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
MPS		: METALIZED POLYESTER
MPP		: METALIZED POLYPROPYLENE
ALB		: BIPOLAR
ALT		: HIGH TEMPERATURE
ALR		: HIGH RIPPLE

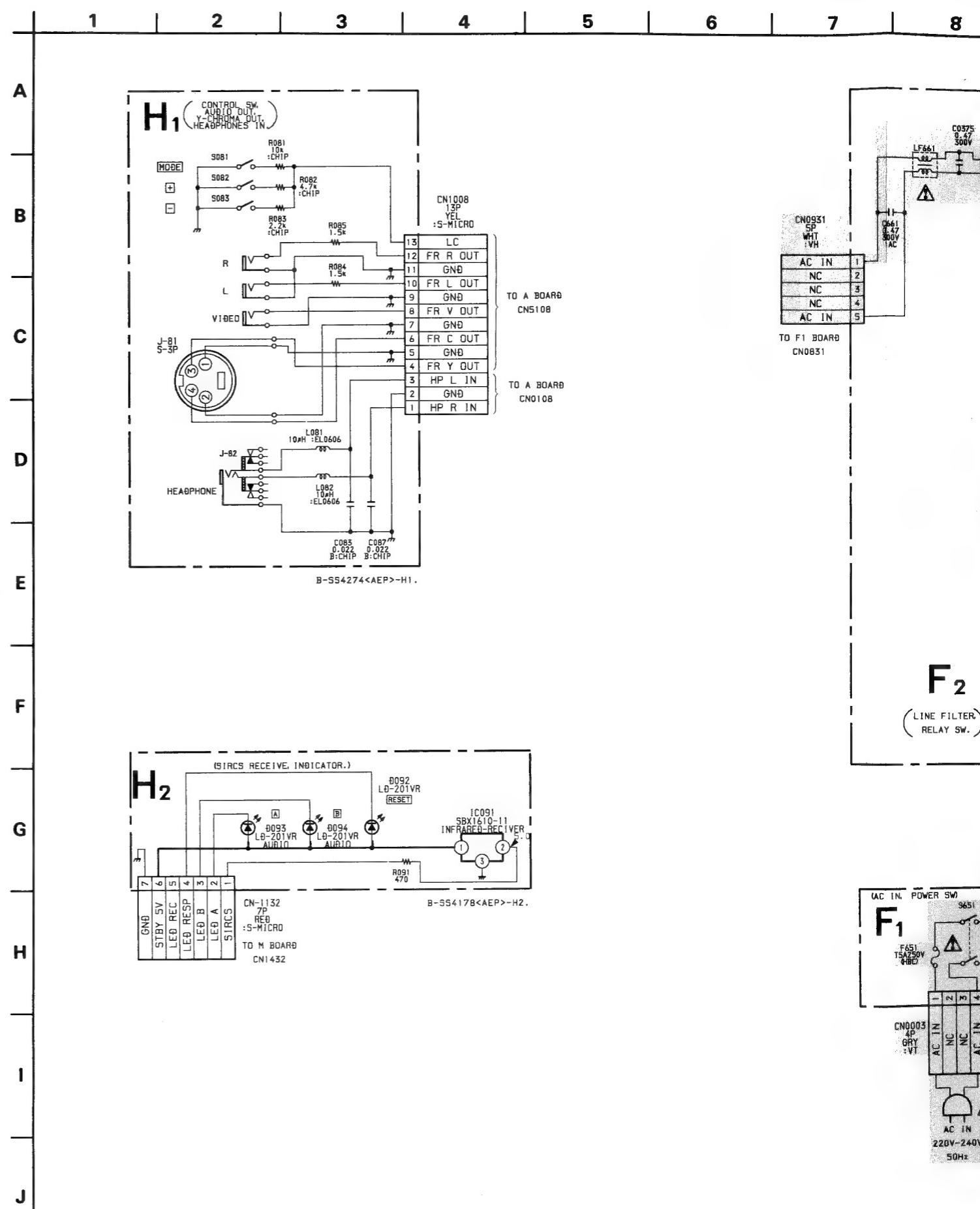
Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par une trame et par une marque sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié.

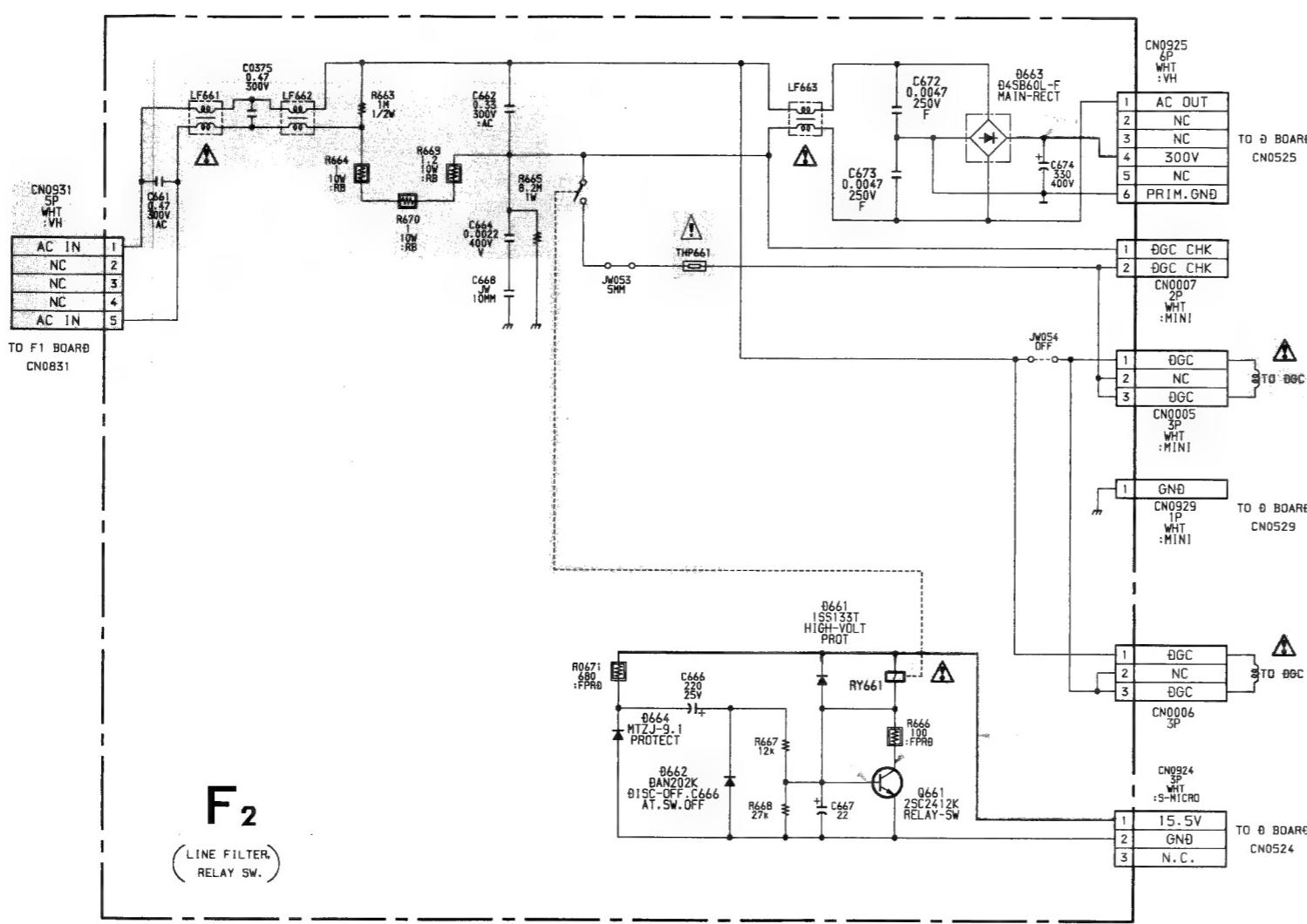
5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :

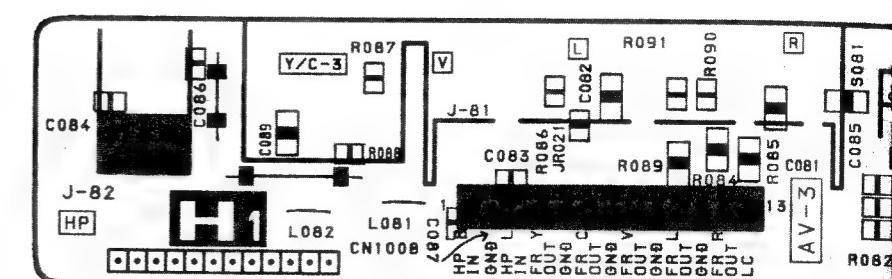
- All capacitors are in μ F unless otherwise noted.
pF : $\mu\mu$ F 50V or less are not indicated except for electrolytic.
 - Indication of resistance, which dose not have one for rating electrical power, is as follows.
- | |
|--------------------------------|
| Pitch : 5mm |
| Rating electrical power : 1/4W |
- Chip resistor is in 1/10W.
 - All resistors are in ohms.
 $k\Omega = 1000\Omega$, $M\Omega = 1000K\Omega$
 - : nonflammable resistor.
 - : fusible resistor.
 - Δ : internal component.
 - : panel designation or adjustment for repair.
 - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
 - : earth - ground
 - : earth - chassis
 - All voltages are in V.
 - Readings are taken with a 10M Ω digital multimeter.
 - Readings are taken with a color-bar signal input.
 - Voltage variations may be noted due to normal production tolerances.
 - : B + bus.
 - : B - bus.
 - : signal path.(RF)



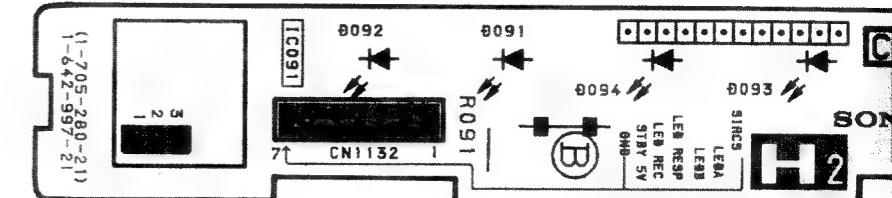
4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

H1 CONTROL SW, AUDIO OUT,
Y-CHROMA OUT,
HEADPHONE IN**H2** SIRCS RECEIVER,
INDICATOR

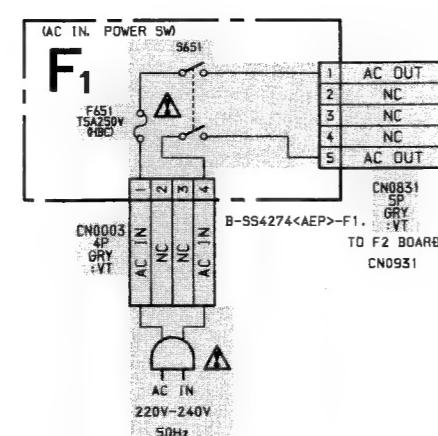
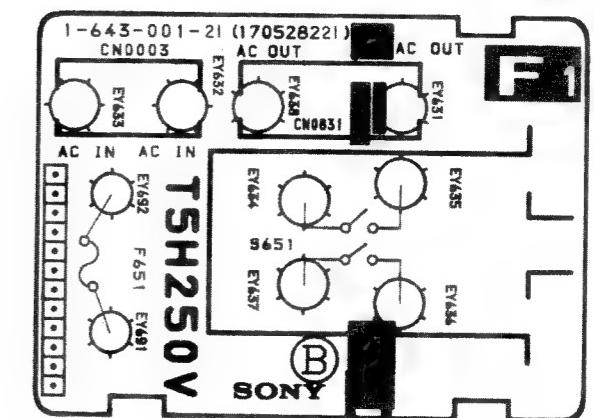
- H1 BOARD -



- H2 BOARD -



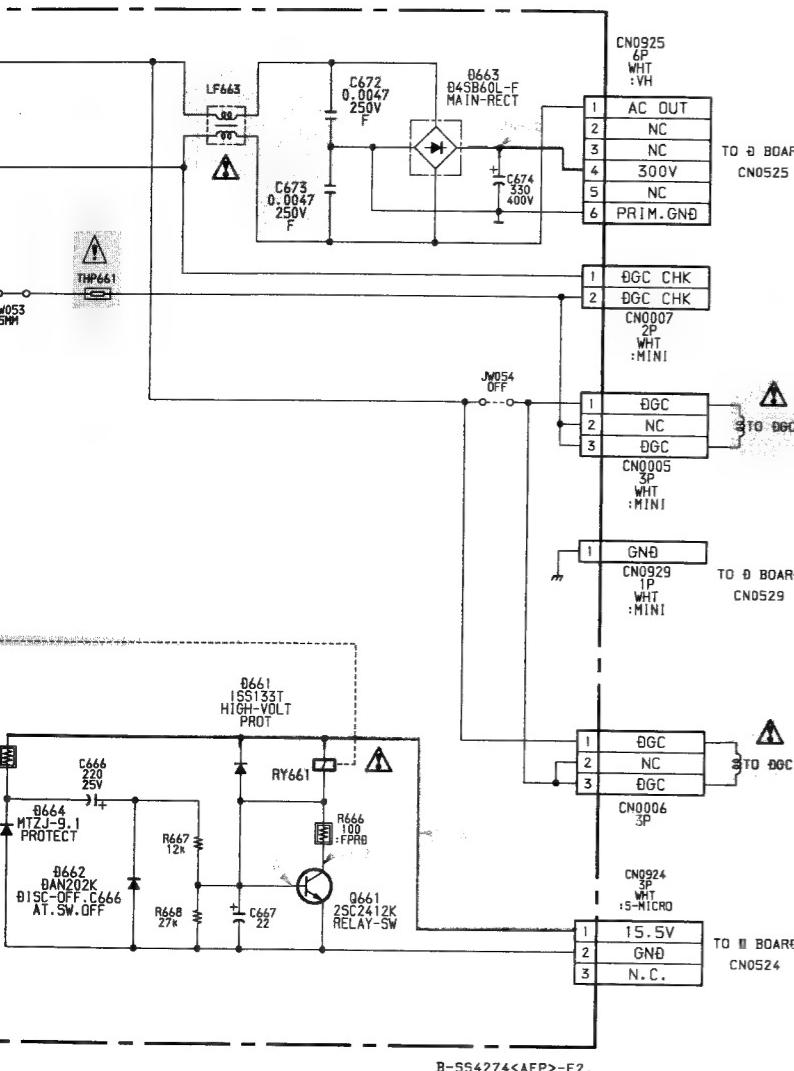
- F1 BOARD -



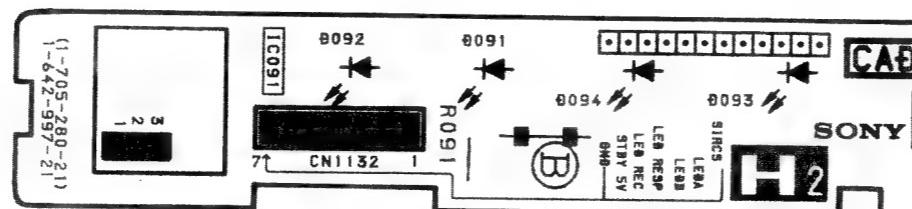
11 | 12 | 13 | 14 |

H1 [CONTROL SW, AUDIO OUT,
Y-CHROMA OUT,
HEADPHONE IN] **H2** [SIRCS RECEIVER,
INDICATOR] **F1** [AC IN,
POWER SW] **F2** [LINE FILTER
RELAY SW]

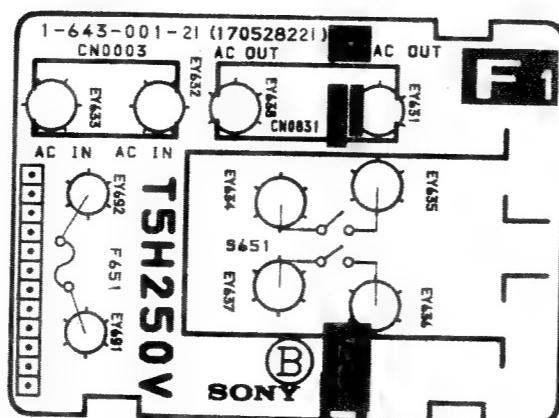
– H1 BOARD



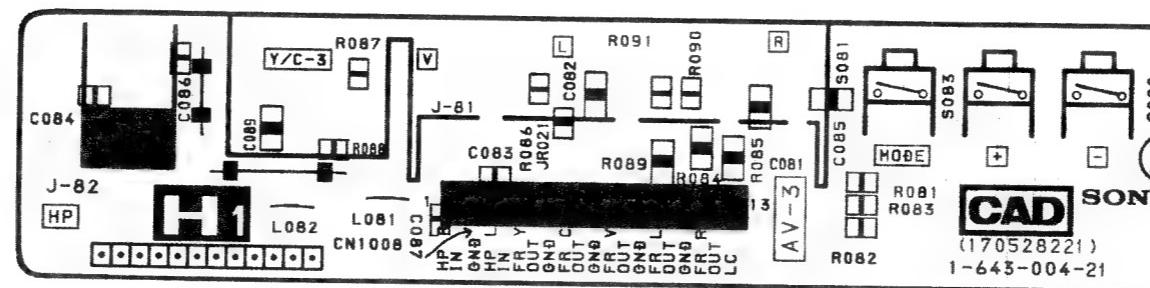
— H2 BOARD



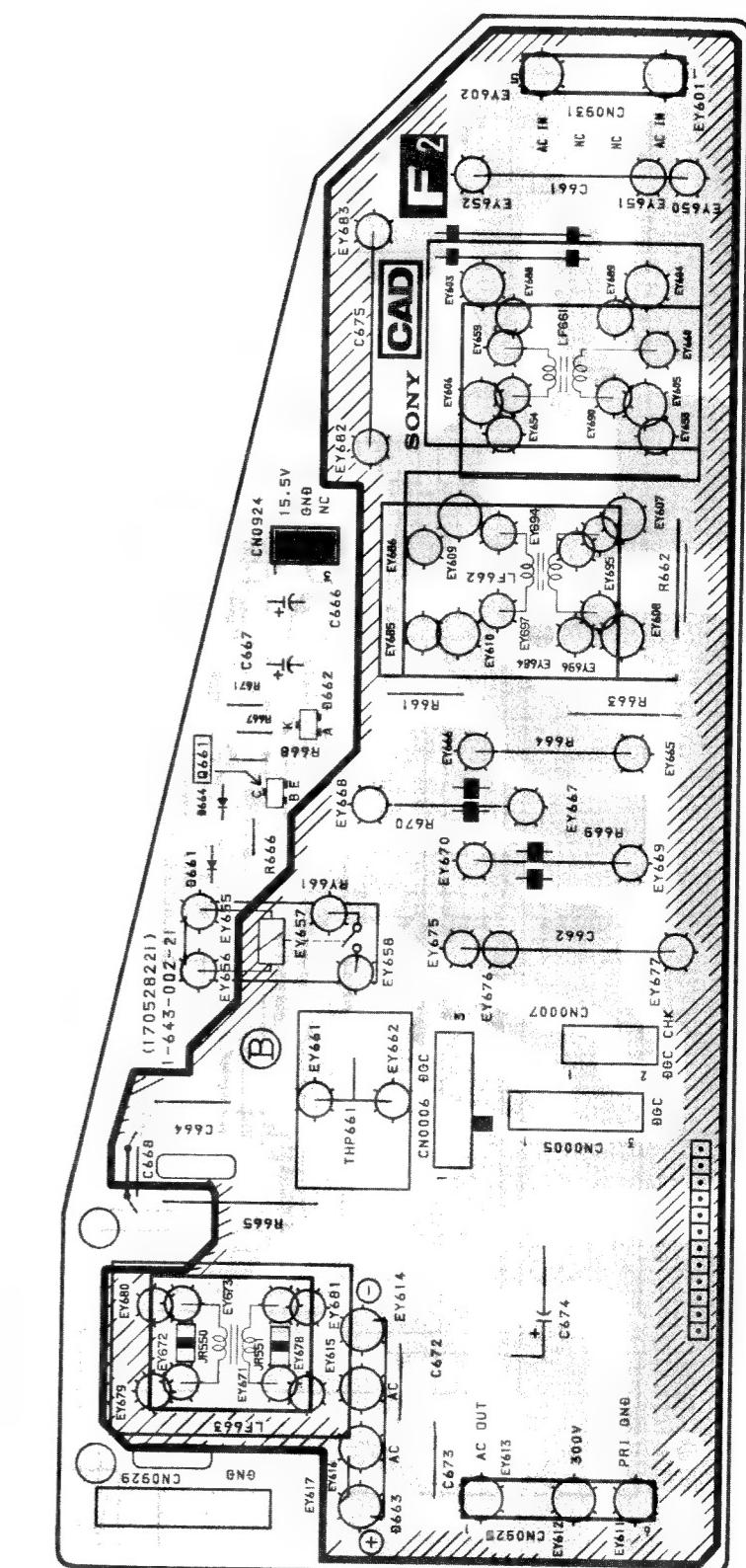
- F1 BOARD -

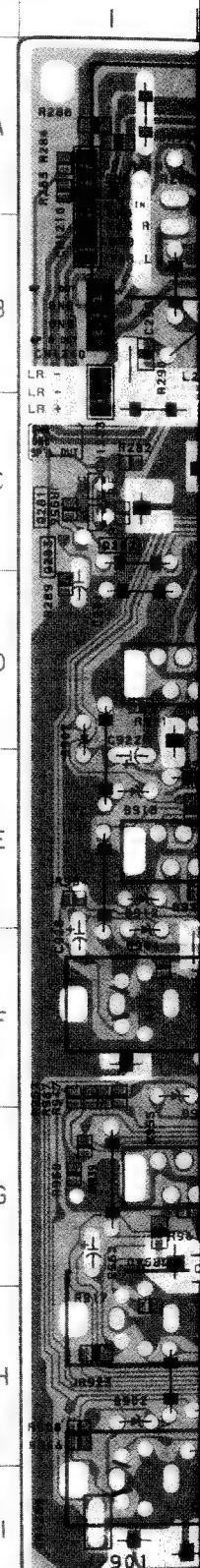
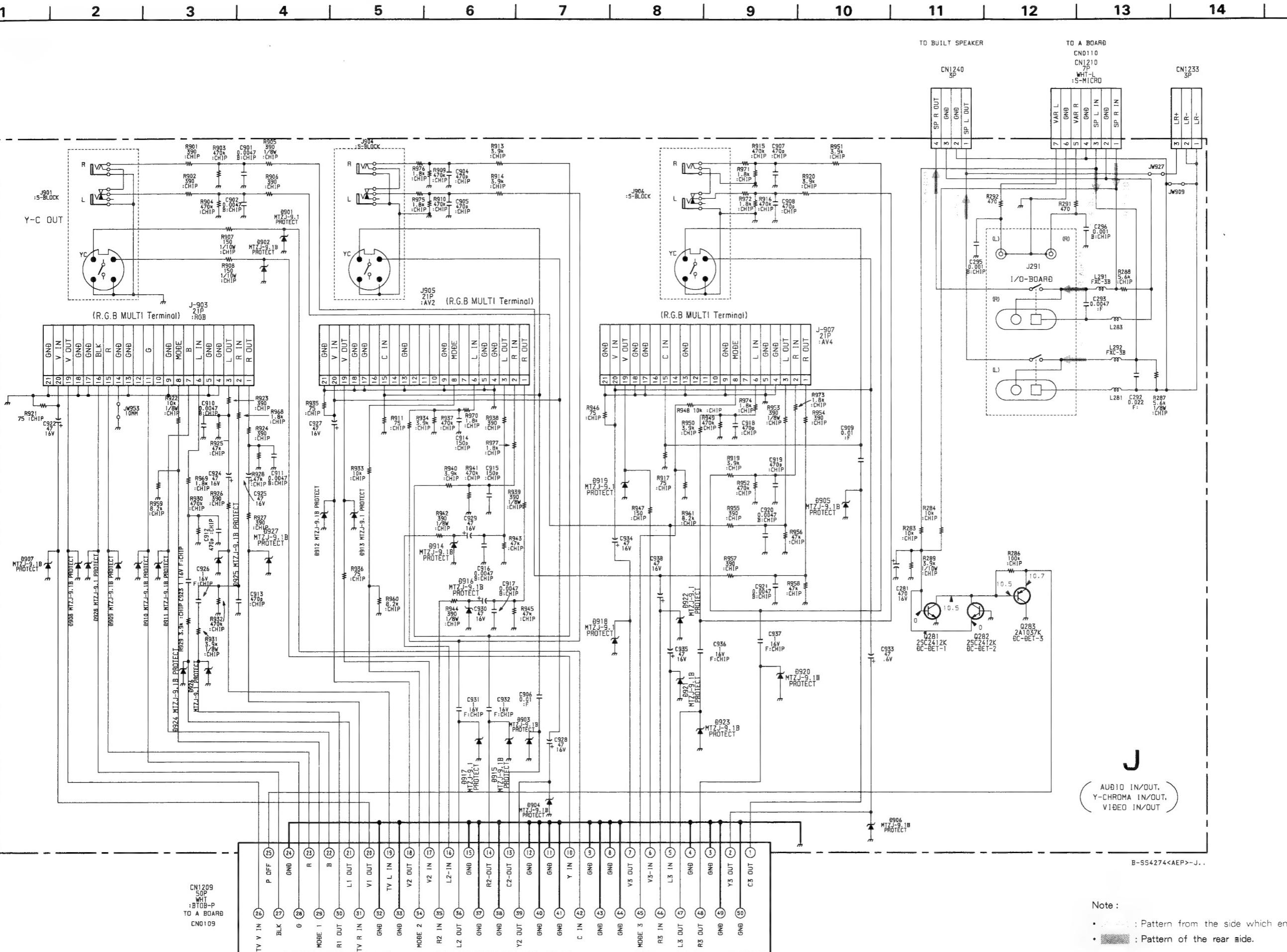


– H1 BOARD –



– F2 BOARD

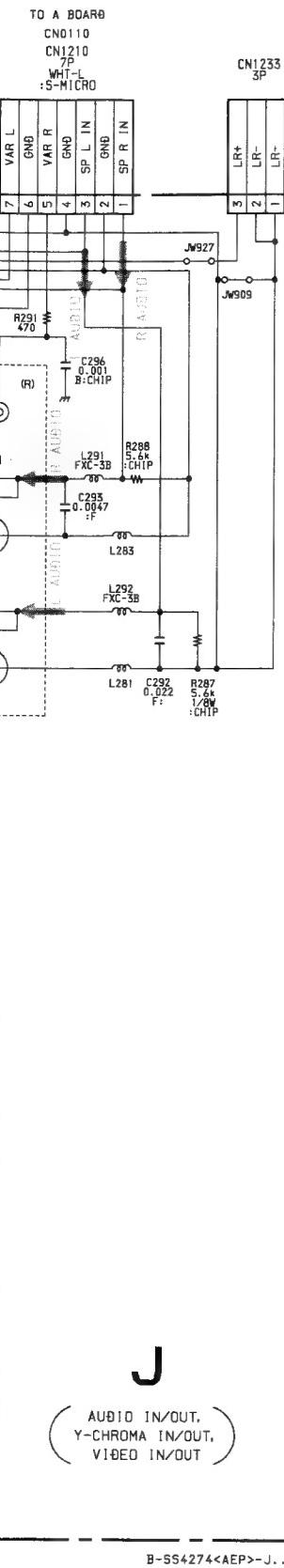




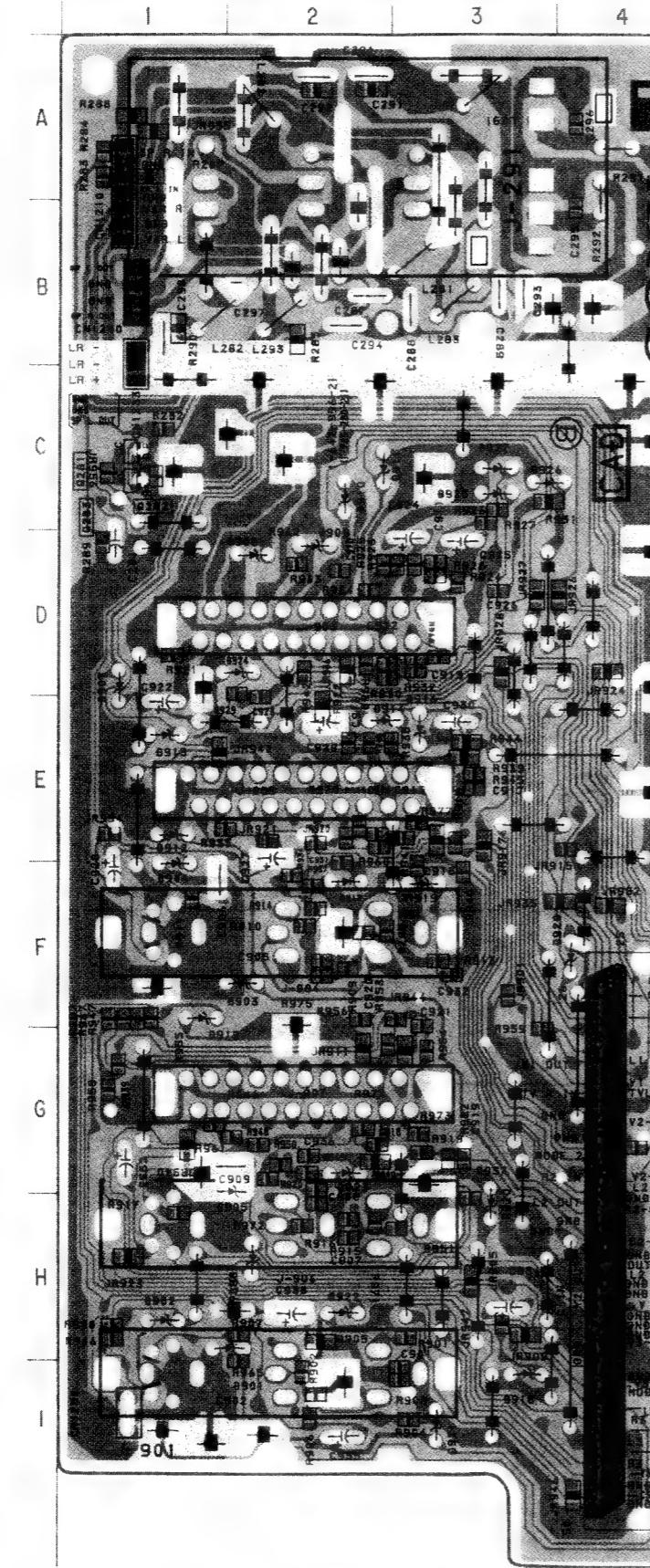
Note :

- : Pattern from the side which enables seeing.
 - : Pattern of the rear side.

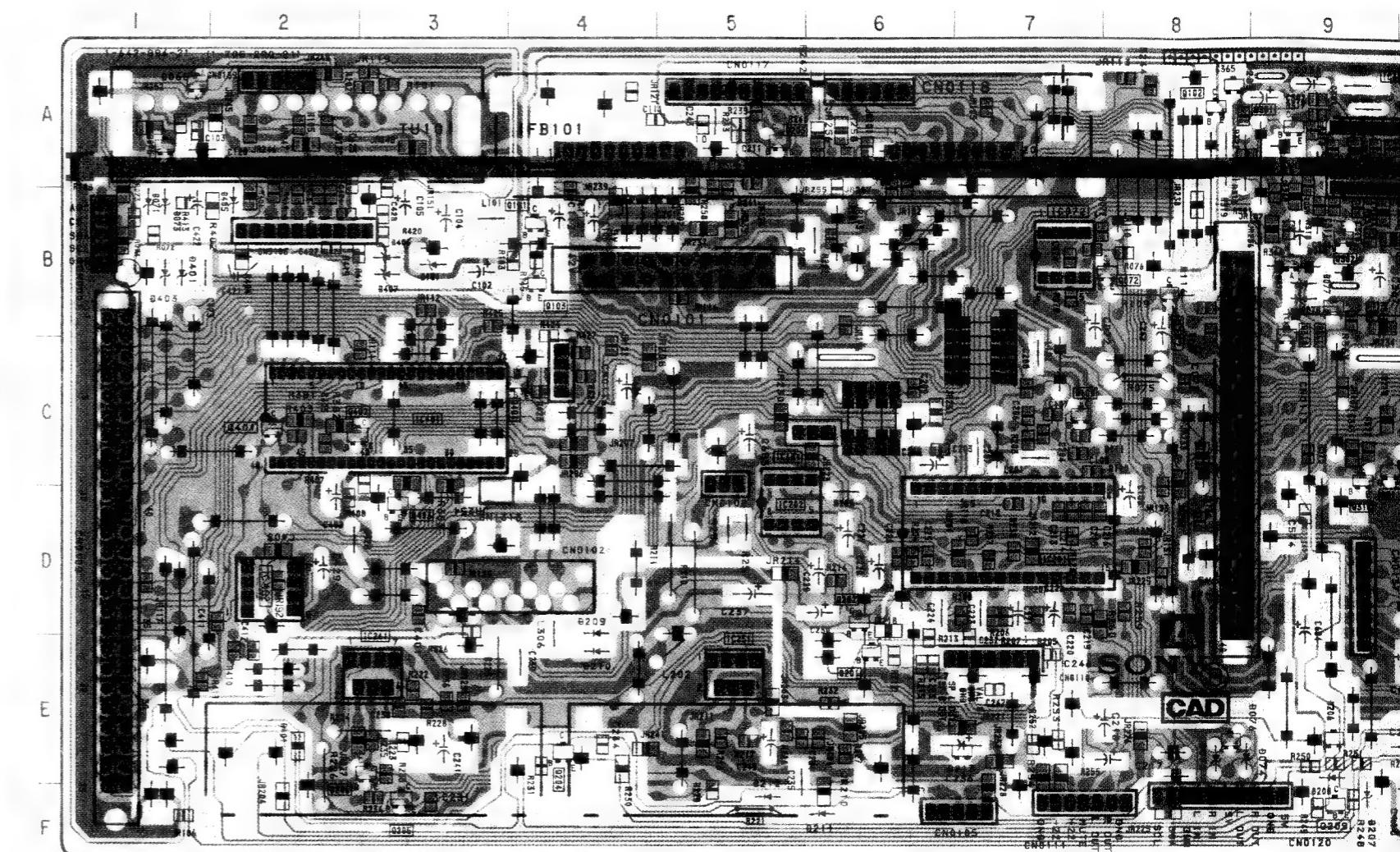
12 13 14



- J BOARD -



- A BOARD -



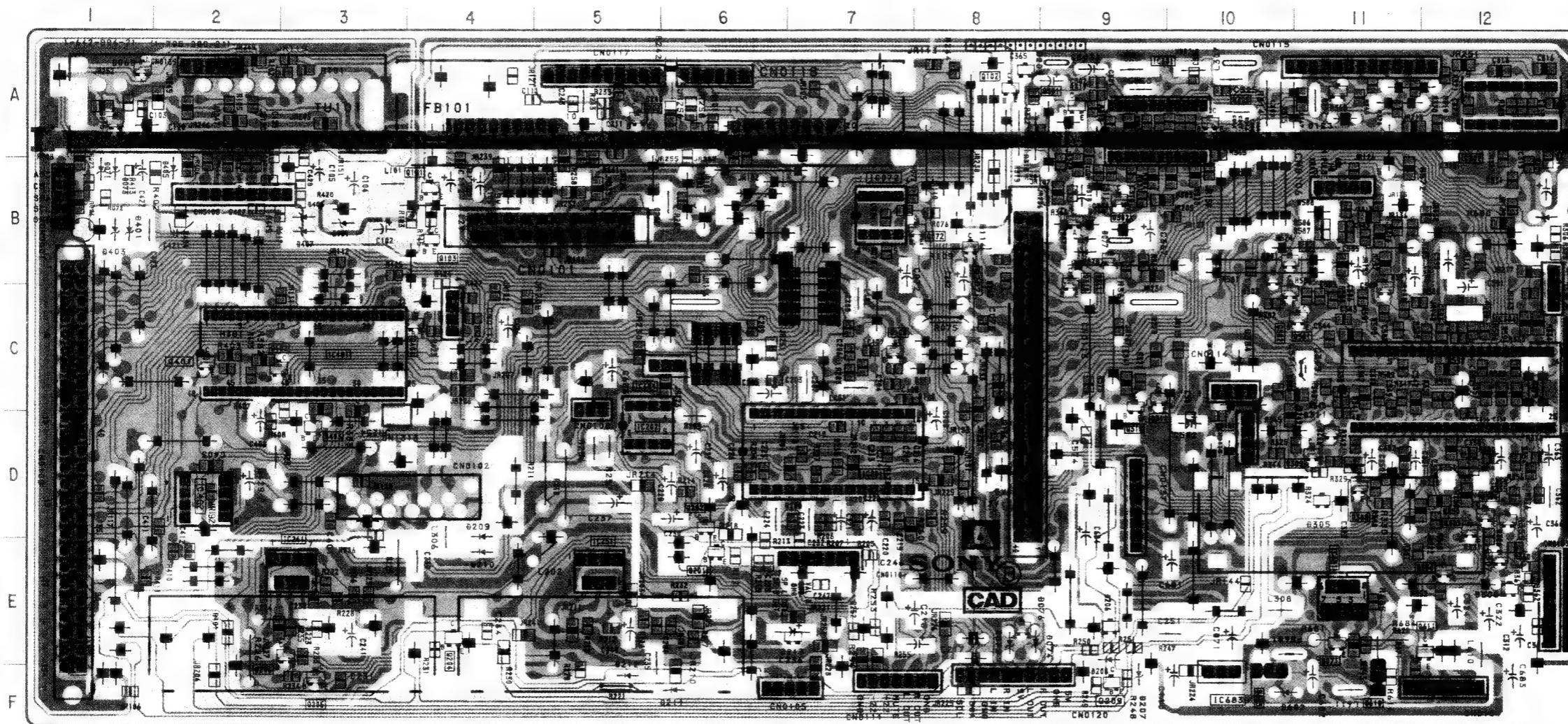
TRANSISTOR	D912	E - 1	
Q281	C - 1	D913	E - 1
Q282	C - 1	D914	F - 2
DIODE	D915	F - 3	
D901	H - 2	D916	E - 3
D902	H - 1	D917	F - 2
D903	F - 2	D918	I - 3
D904	F - 1	D919	F - 1
D905	G - 2	D920	H - 3
D906	H - 2	D921	I - 3
D907	D - 1	D922	H - 2
D908	D - 2	D923	G - 2
D909	D - 2	D924	D - 2
D910	C - 2	D925	C - 3
D911	C - 2	D926	C - 3
		D927	C - 3
		D928	F - 4

Note:

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

AUDIO, CONTROL, AUDIO AMP
TCH, RGB JUNGLE,
PROCESSOR

- A BOARD -

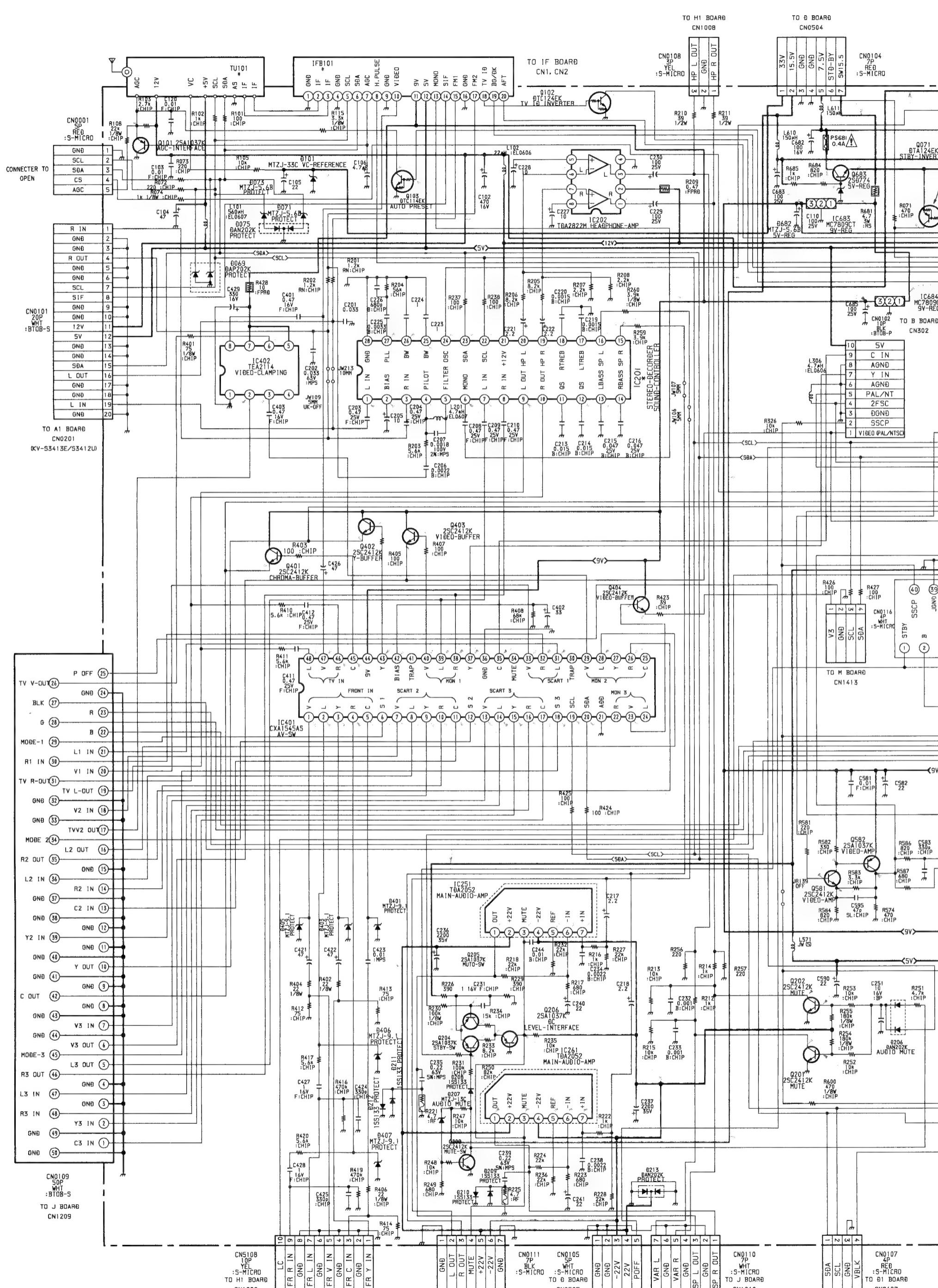


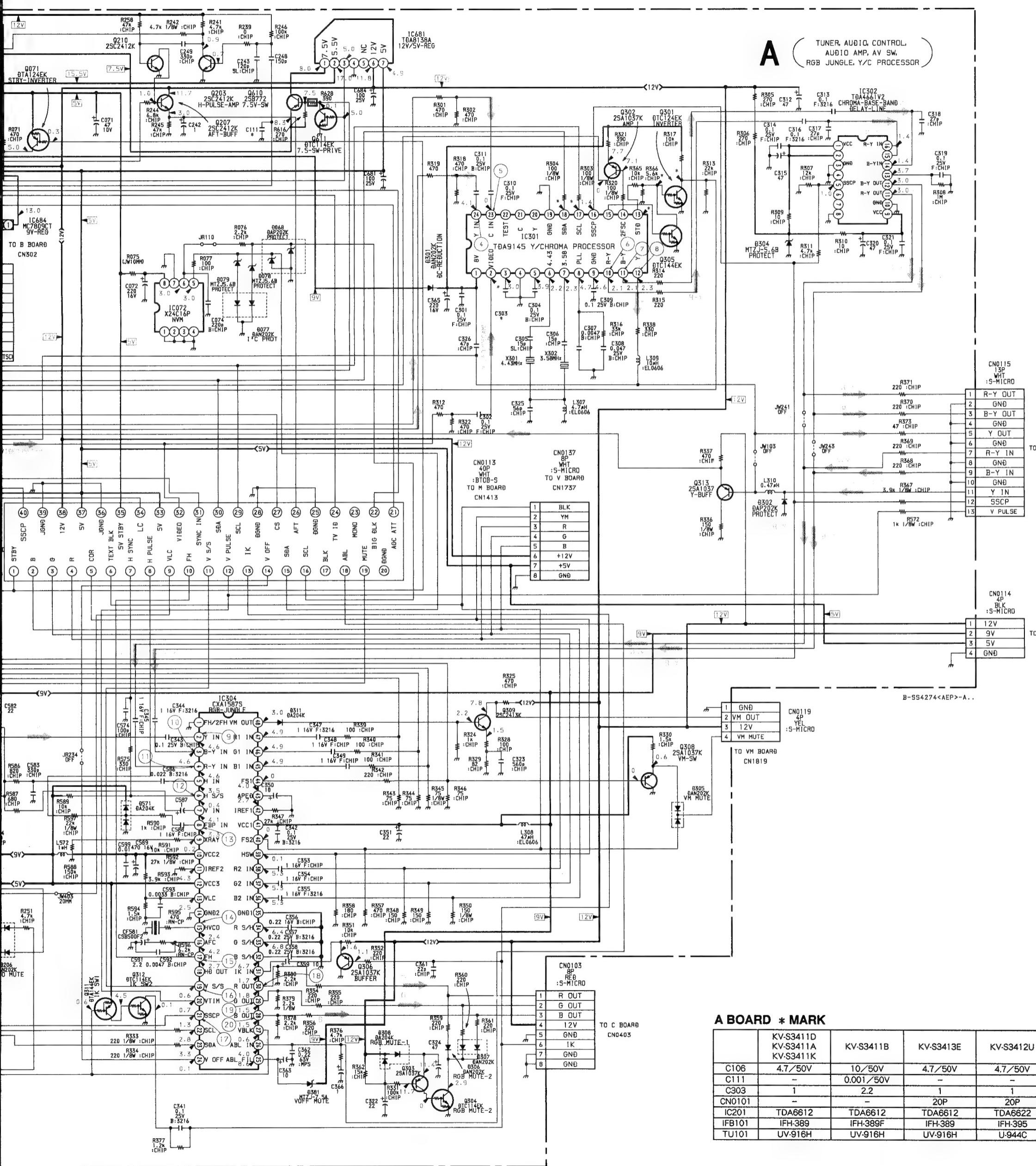
Note :

- Pattern from the top side (FRONT SIDE)
- : Pattern of the rear side.

TRANSISTOR	
Q281	C - 1
Q282	C - 1
DIODE	
D901	H - 2
D902	H - 1
D903	F - 2
D904	F - 1
D905	G - 2
D906	H - 2
D907	D - 1
D908	D - 2
D909	D - 2
D910	C - 2
D911	C - 2
D912	E - 1
D913	E - 1
D914	F - 2
D915	F - 3
D916	E - 3
D917	F - 2
D918	I - 3
D919	F - 1
D920	H - 3
D921	I - 3
D922	H - 2
D923	G - 2
D924	D - 2
D925	C - 3
D926	C - 3
D927	C - 3
D928	F - 4

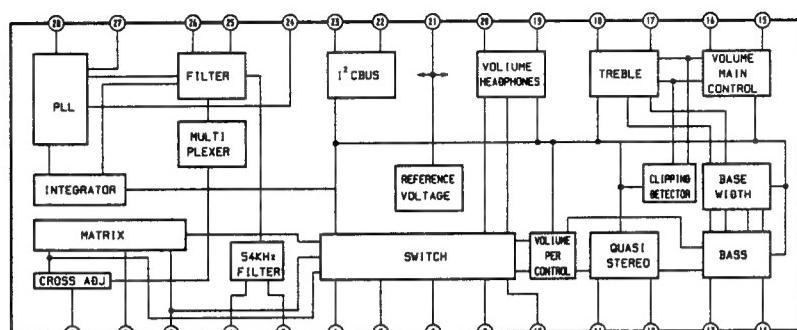
IC	
Q404	C - 4
Q581	C - 11
Q582	C - 10
Q610	F - 11
Q611	E - 12
Q683	F - 10
DIODE	
D068	B - 9
D069	A - 1
D071	B - 1
D073	B - 1
D075	A - 1
D077	B - 9
D078	B - 9
D079	B - 9
D101	B - 3
D206	E - 9
D207	F - 9
D208	E - 9
D209	E - 4
D210	E - 4
D211	F - 6
D212	F - 5
D213	E - 7
D301	B - 10
D302	A - 11
D304	B - 12
D305	D - 11
D306	D - 12
D307	E - 12
D308	E - 12
D311	D - 11
D381	C - 10
D401	B - 1
D403	B - 1
D405	B - 2
D406	B - 3
D407	B - 3
Q071	E - 11
Q101	B - 4
Q102	A - 8
Q103	B - 4
Q201	E - 6
Q202	D - 6
Q203	A - 5
Q204	E - 4
Q205	F - 3
Q206	E - 3
Q207	B - 8
Q209	F - 9
Q210	A - 9
Q301	B - 9
Q302	D - 12
Q303	D - 12
Q304	D - 12
Q305	A - 10
Q306	E - 12
Q308	D - 11
Q309	D - 11
Q311	C - 9
Q312	C - 9
Q313	C - 2
Q401	C - 2
Q402	C - 2
Q403	D - 3



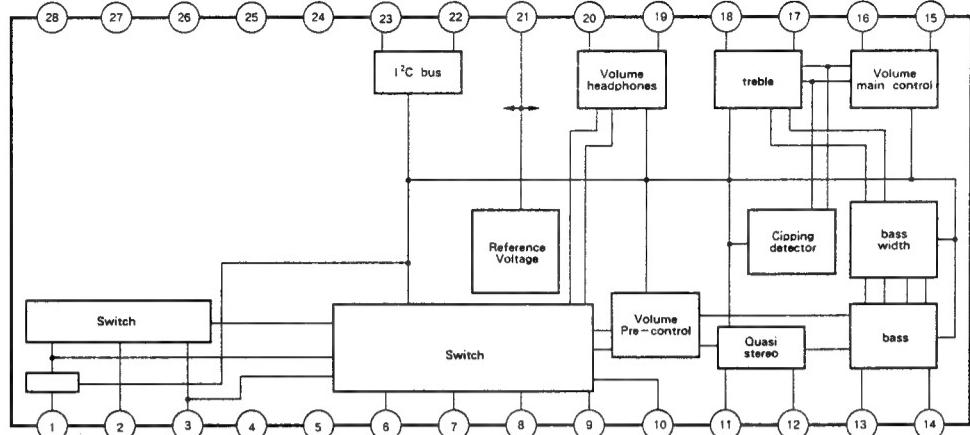


	PAL	SECAM	NTSC4.43	NTSC3.58
IC301 ②	4.0	4.0	4.0	4.8
③	0	0	4.9	4.9
⑦	3.1	2.8	2.5	2.5
⑧	3.1	3.1	2.8	2.8
Q301 (B)	0	0	1.6	1.6
(C)	4.4	4.4	0.1	0.1

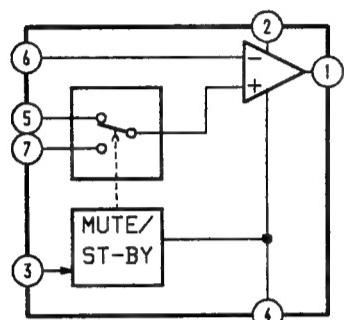
• A BOARD IC201 TDA6612



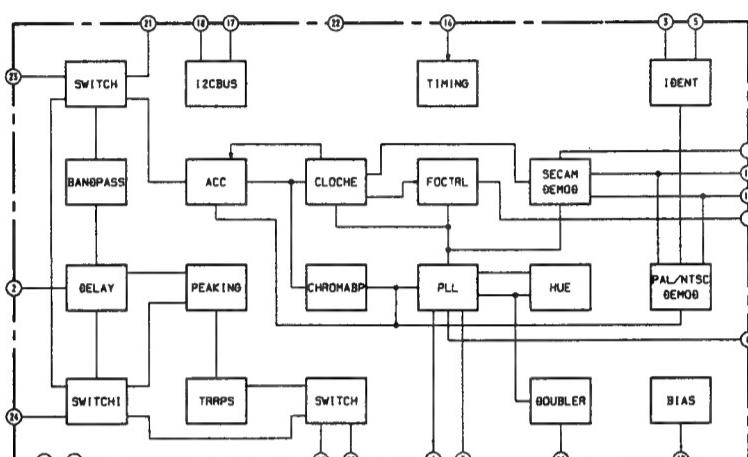
• A BOARD IC201 TDA6622 (UK Model only)



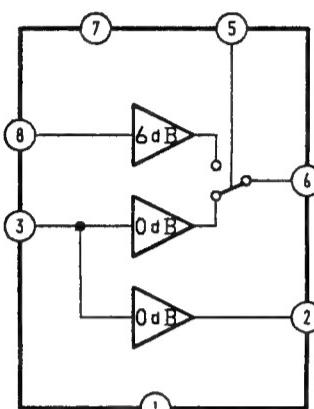
• A BOARD IC251/261 TDA2052



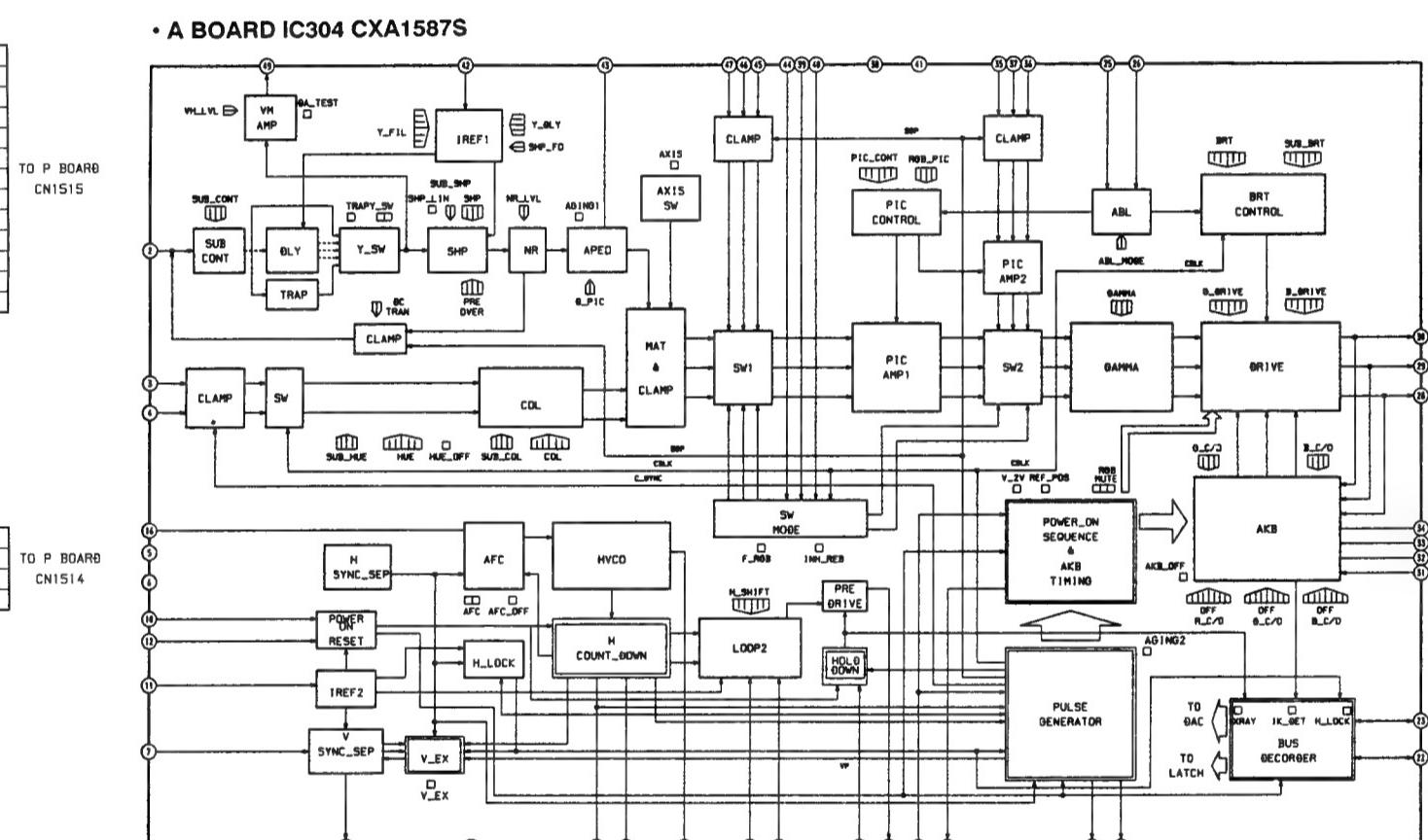
• A BOARD IC301 TDA9145



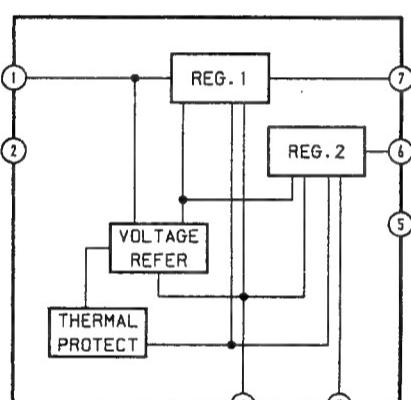
• A BOARD IC402 TEA2114



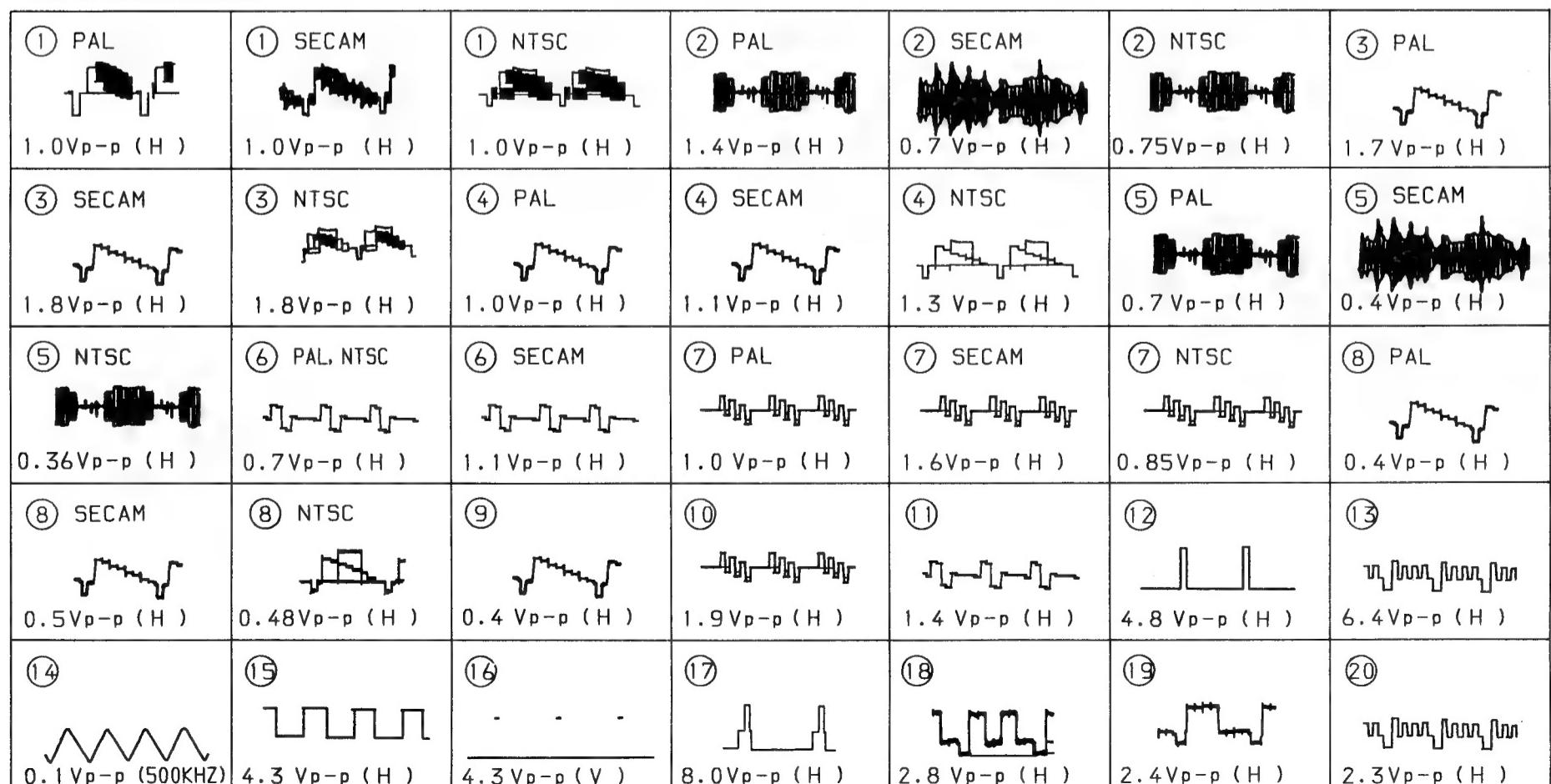
• A BOARD IC304 CXA1587S



• A BOARD IC681 TDA8138



• WAVEFORMS A BOARD



KV-S3412U
4.7/50V
—
1
20P
TDA6622
IFH-395
U-944C

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O

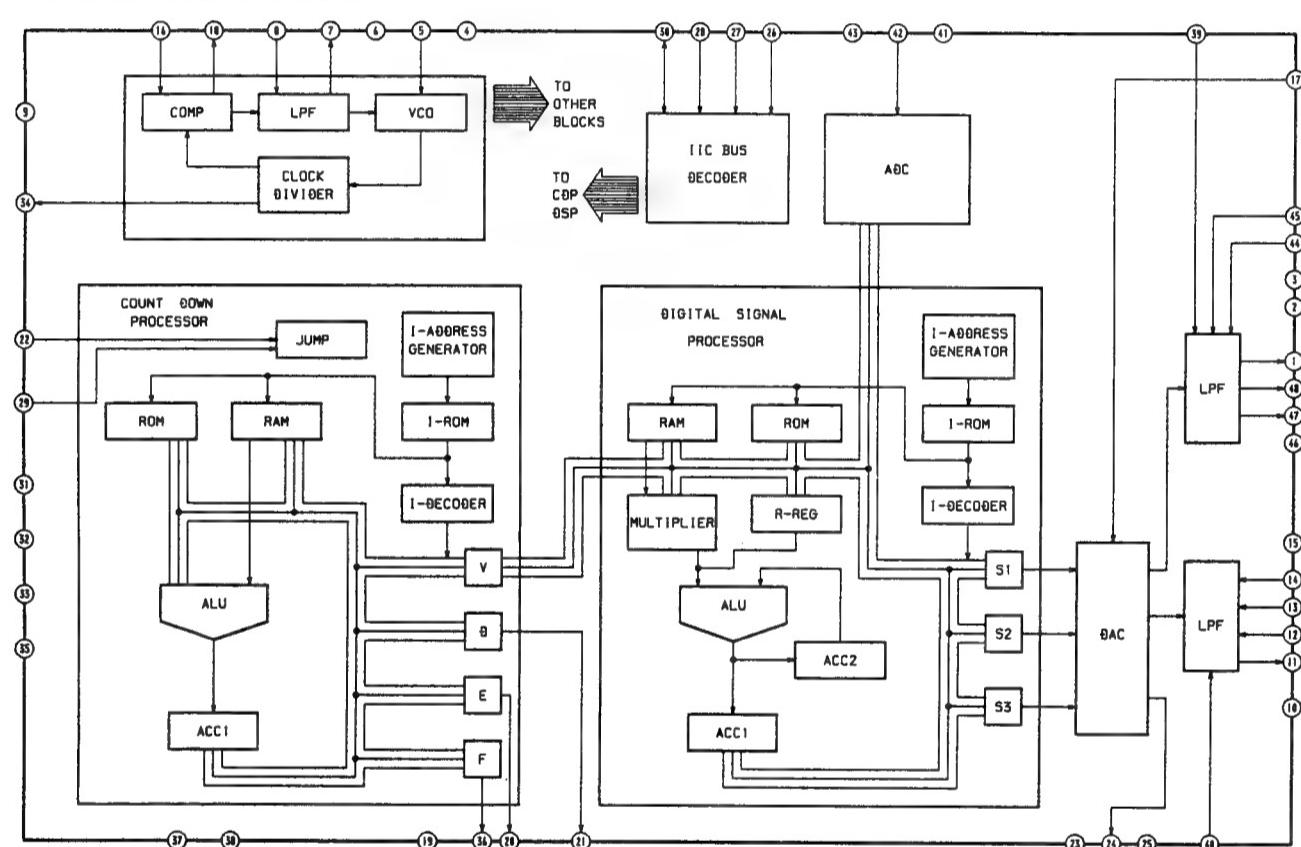
CN1426
6P
YEL
:S-MICRO
PROT
PARA
SAW+
GND
+5V
N/S

TO D BOARD
CN0526

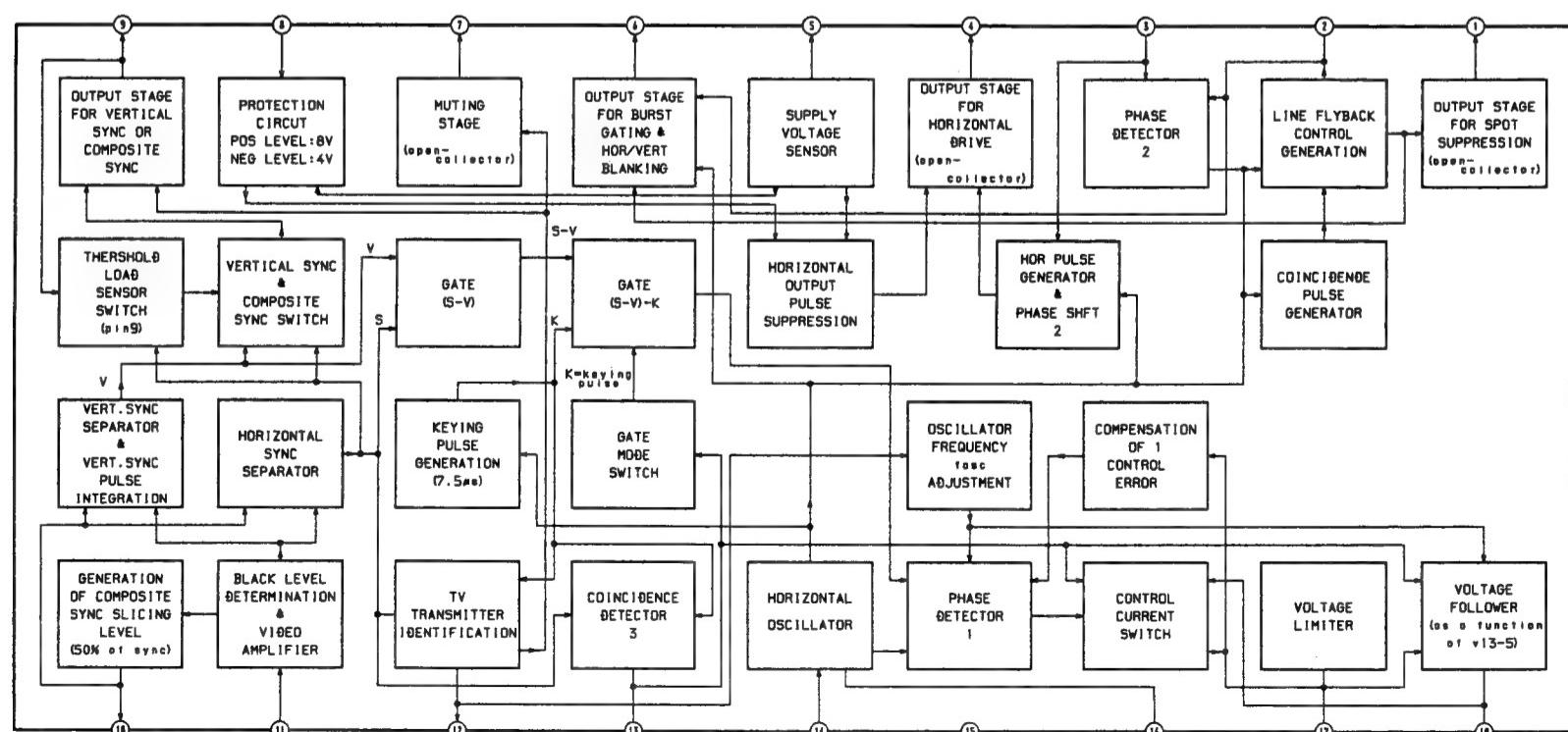
CN1441
8P
REG
:S-MICRO
SDA
SCL
GND
VIDEO
SSCP
H.SAW
REF
GND

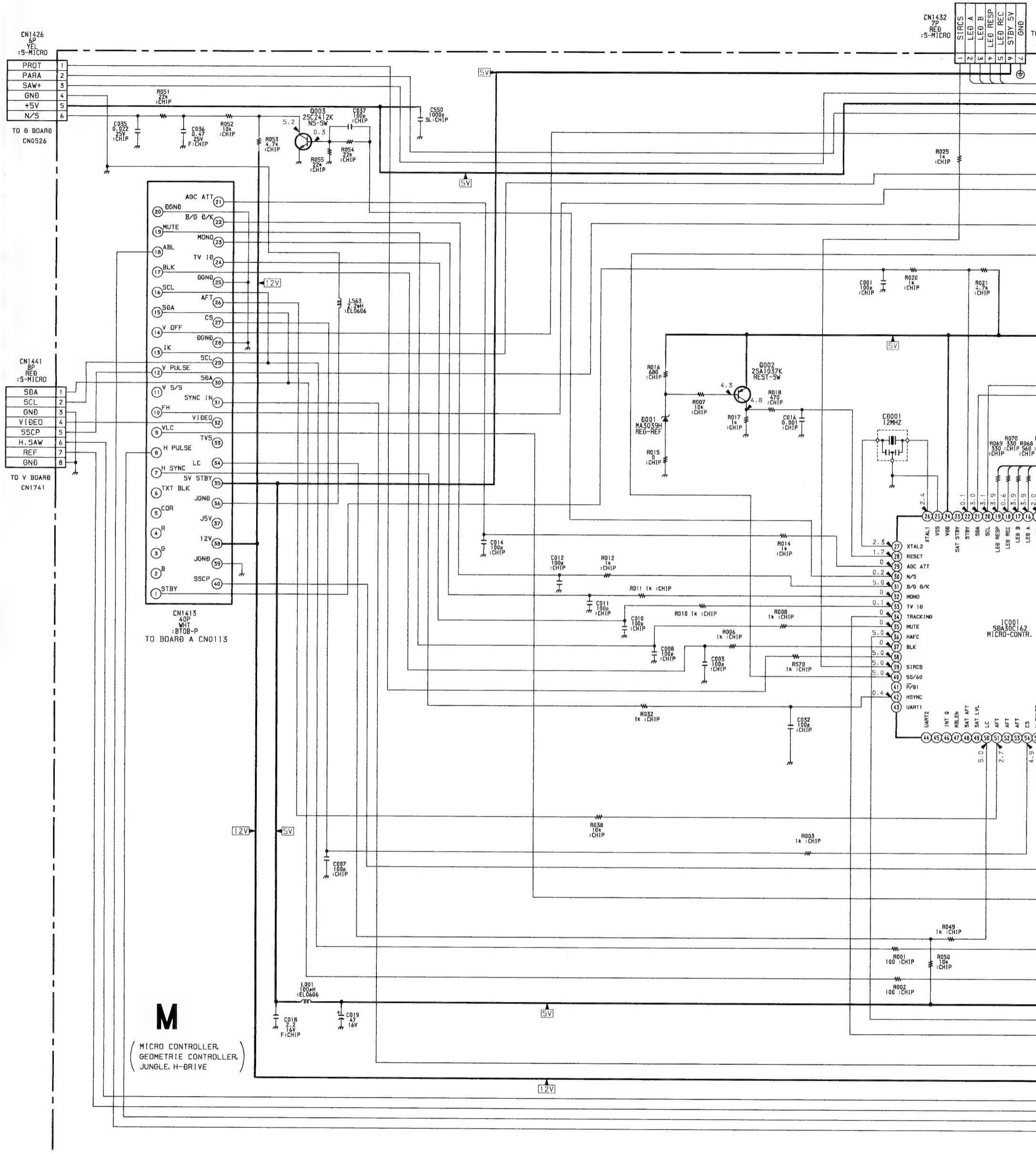
TO V BOARD
CN1741

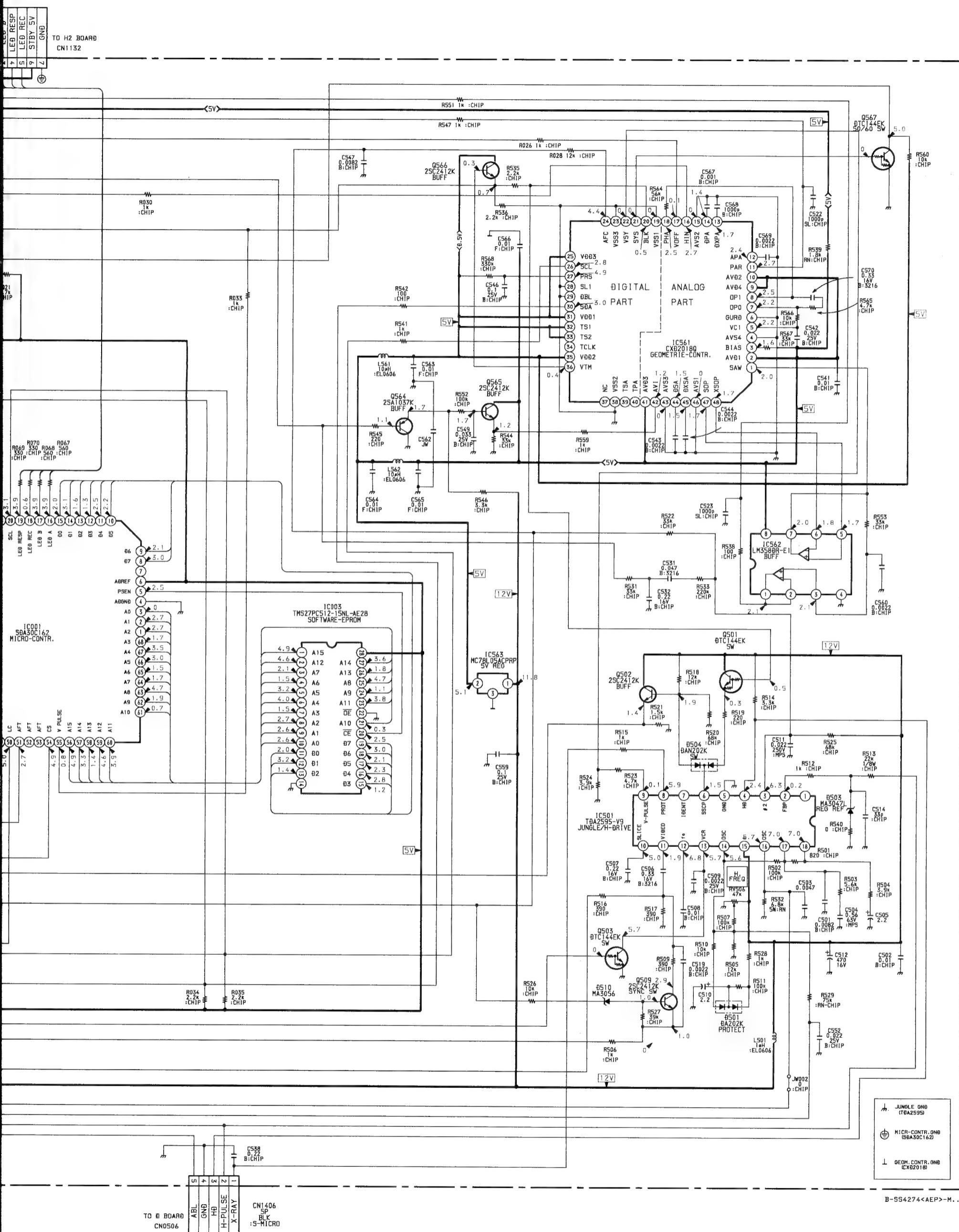
• M BOARD IC561 CXD2018Q



• M BOARD IC501 TDA2595-V9



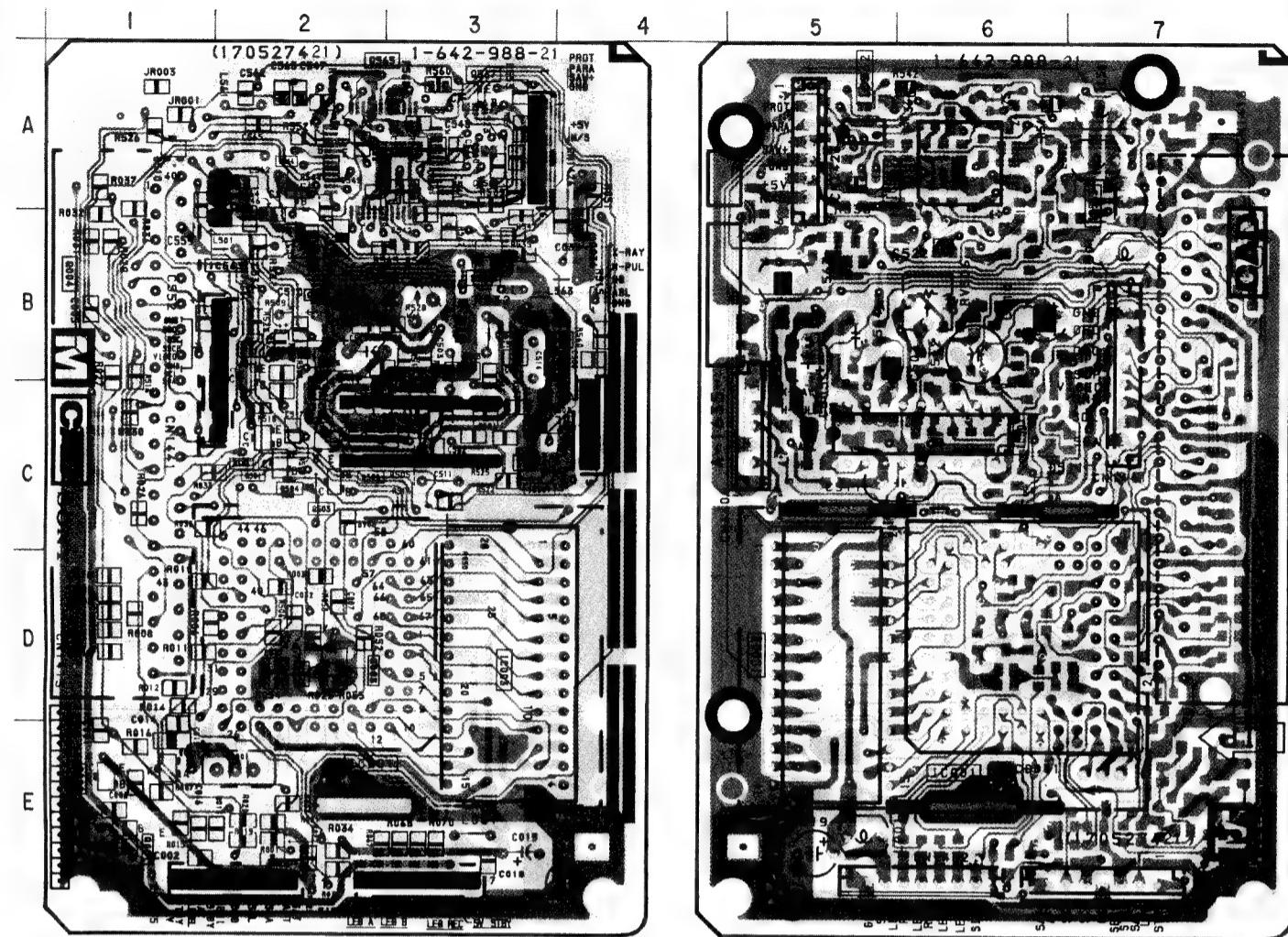




M MICRO CONTROLLER,
GEOMETRIE CONTROLLER
JUNGLE, H-DRIVE

D [H/V OUT, PIN OUT,
POWER SUPPLY]

- M BOARD -



IC DIODE

IC001	D - 2	D001	E - 1
IC003	D - 3	D501	B - 2
IC501	C - 3	D503	C - 4
IC561	A - 6	D504	C - 2
IC562	A - 5	D510	A - 1
IC563	A - 7		

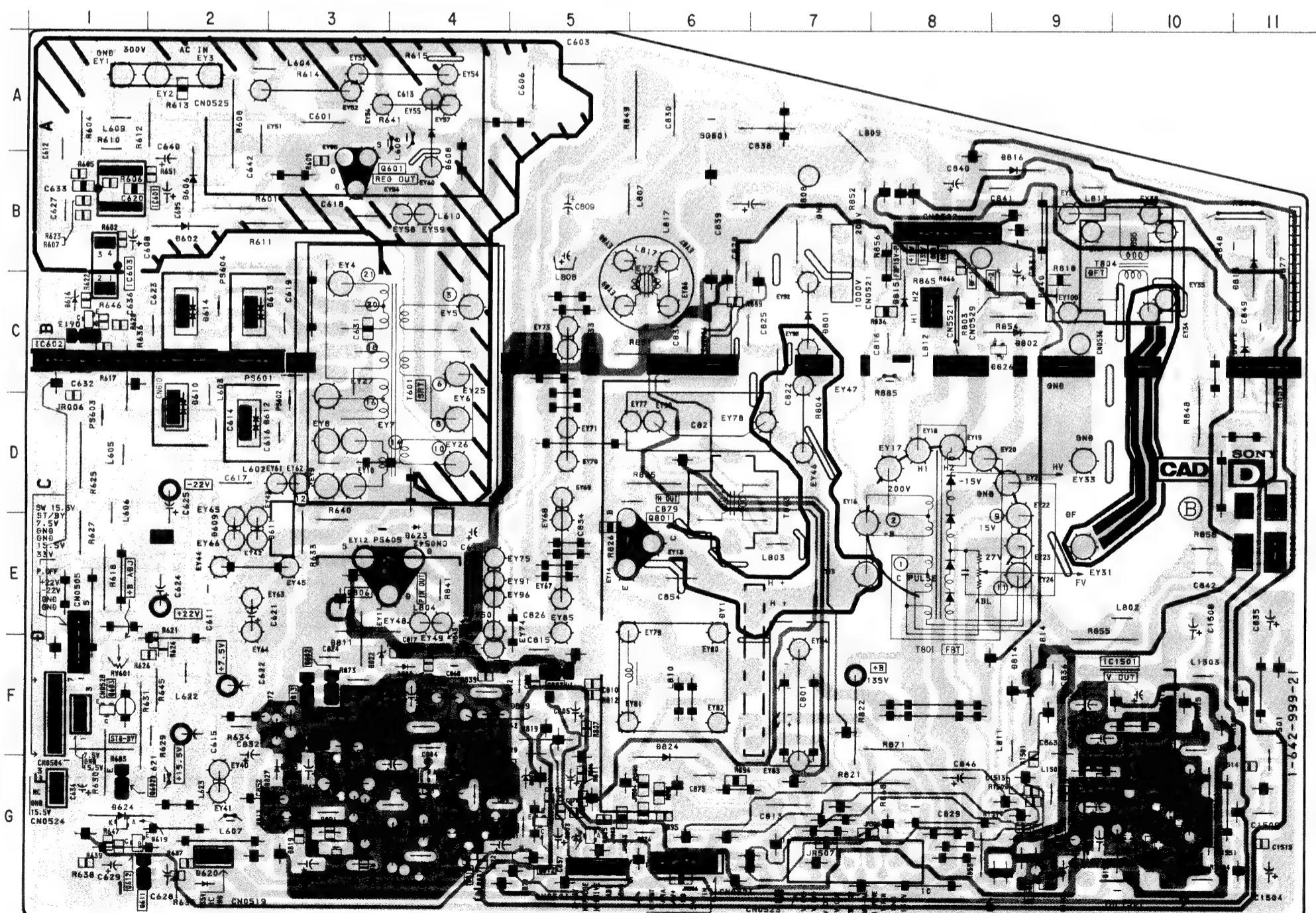
TRANSISTOR VARIABLE RESISTOR

Q002	E - 1	RV506	B - 3
Q003	D - 2		
Q501	C - 2		
Q502	B - 2		
Q503	C - 2		
Q508	C - 2		
Q509	B - 2		
Q564	A - 2		
Q565	A - 2		
Q566	B - 3		
Q567	A - 3		

Note :

- Pattern from the side which enables seeing.
- Pattern of the rear side.

- D BOARD -



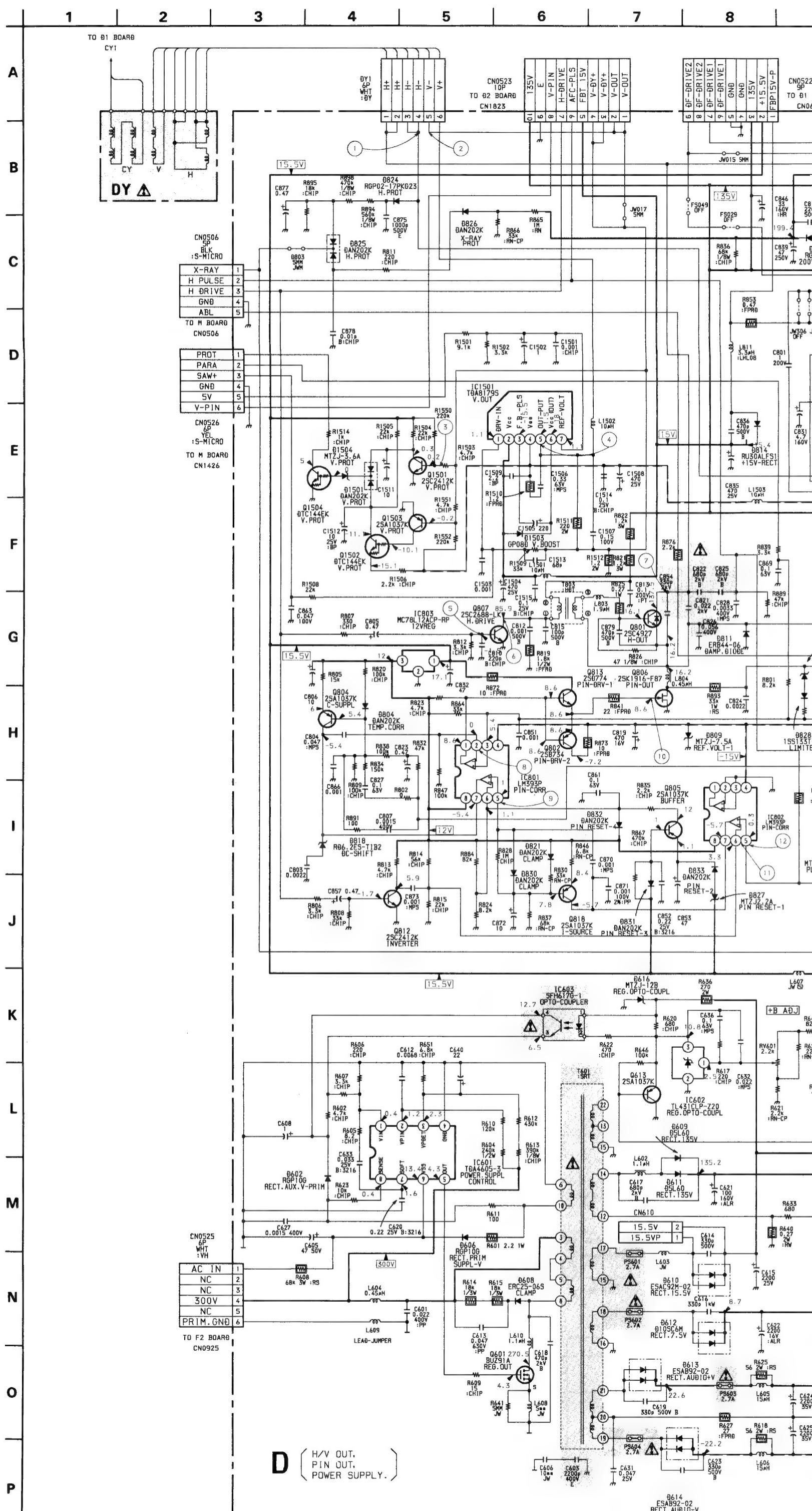
IC
IC601
IC602
IC603
IC801
IC802
IC803
IC1501

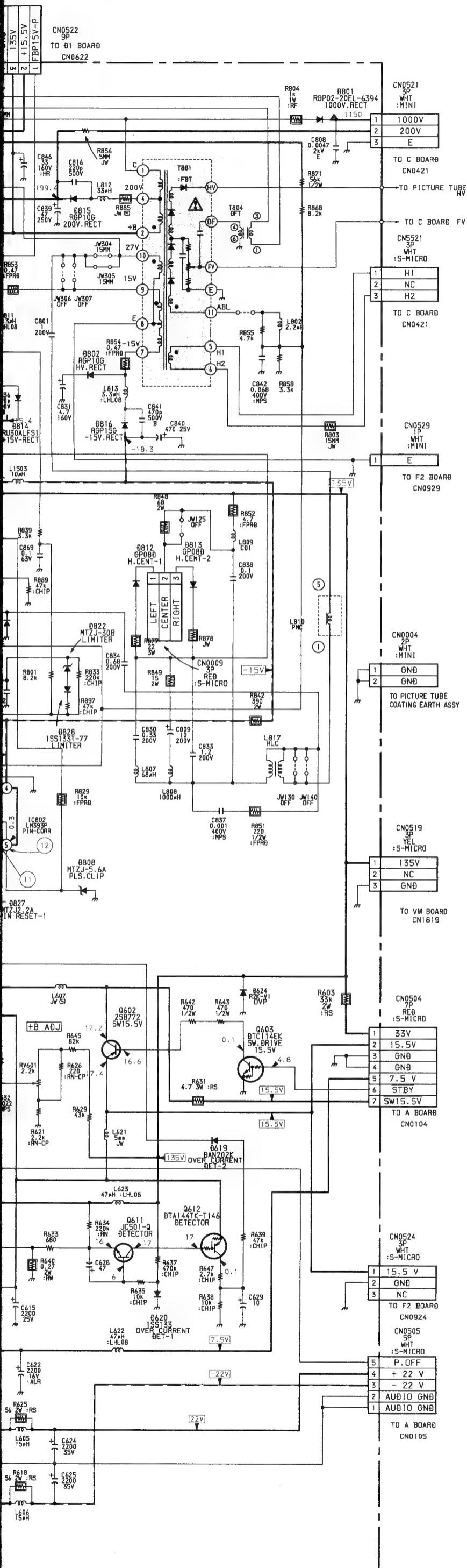
TRANS
0601
0602
0603
0611
0612
0613
0801
0802
0804
0805
0806
0807
0812
0813
0818
Q1501
Q1502
Q1503
Q1504

DIO
D602
D606
D608
D609
D610
D611

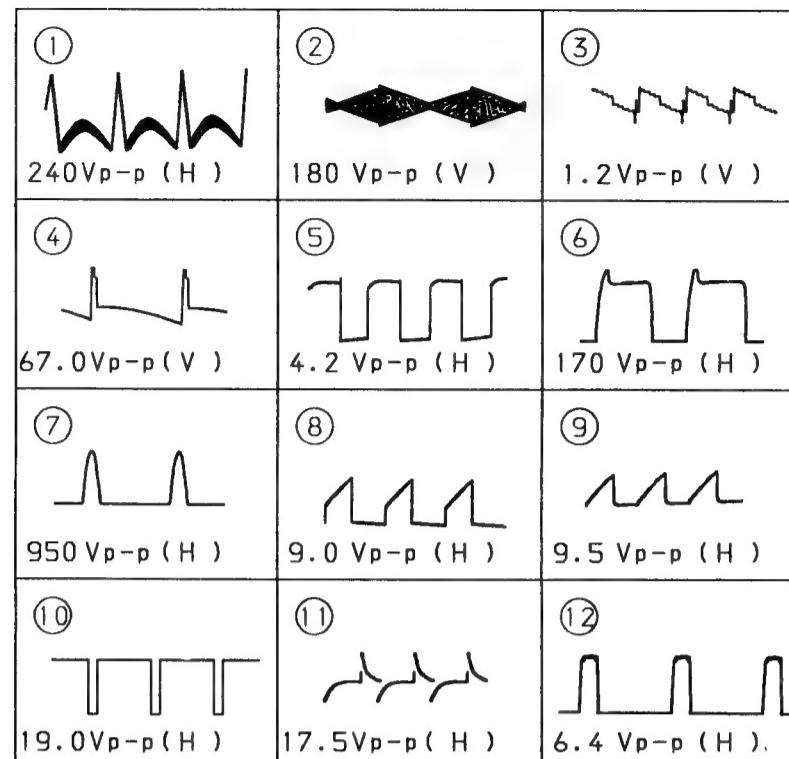
Note :

- Pattern from the side which enables seeing.
- Pattern of the rear side.

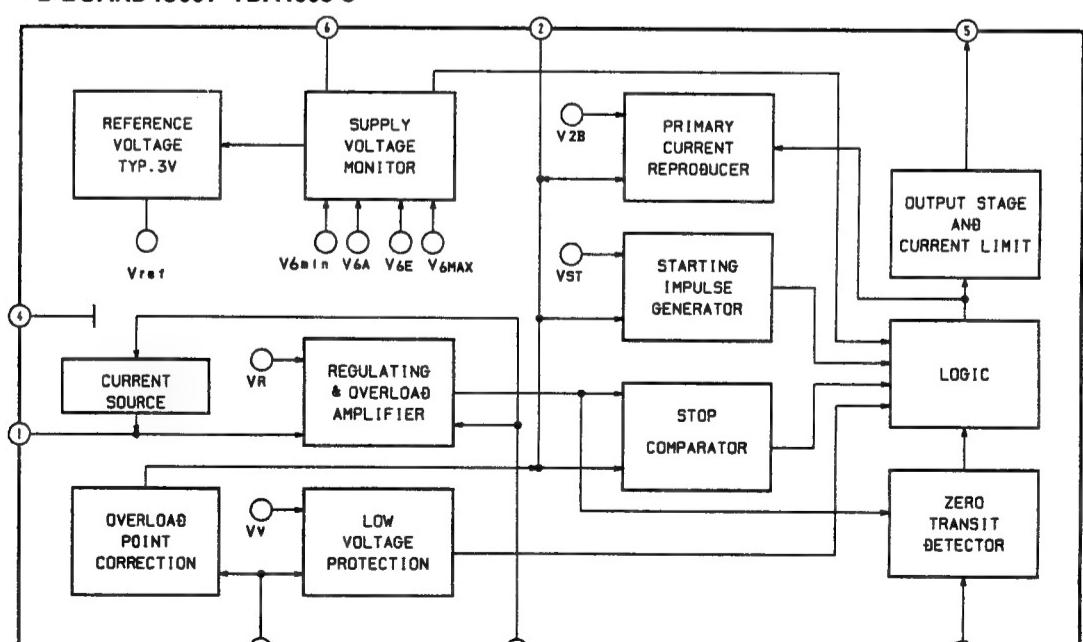


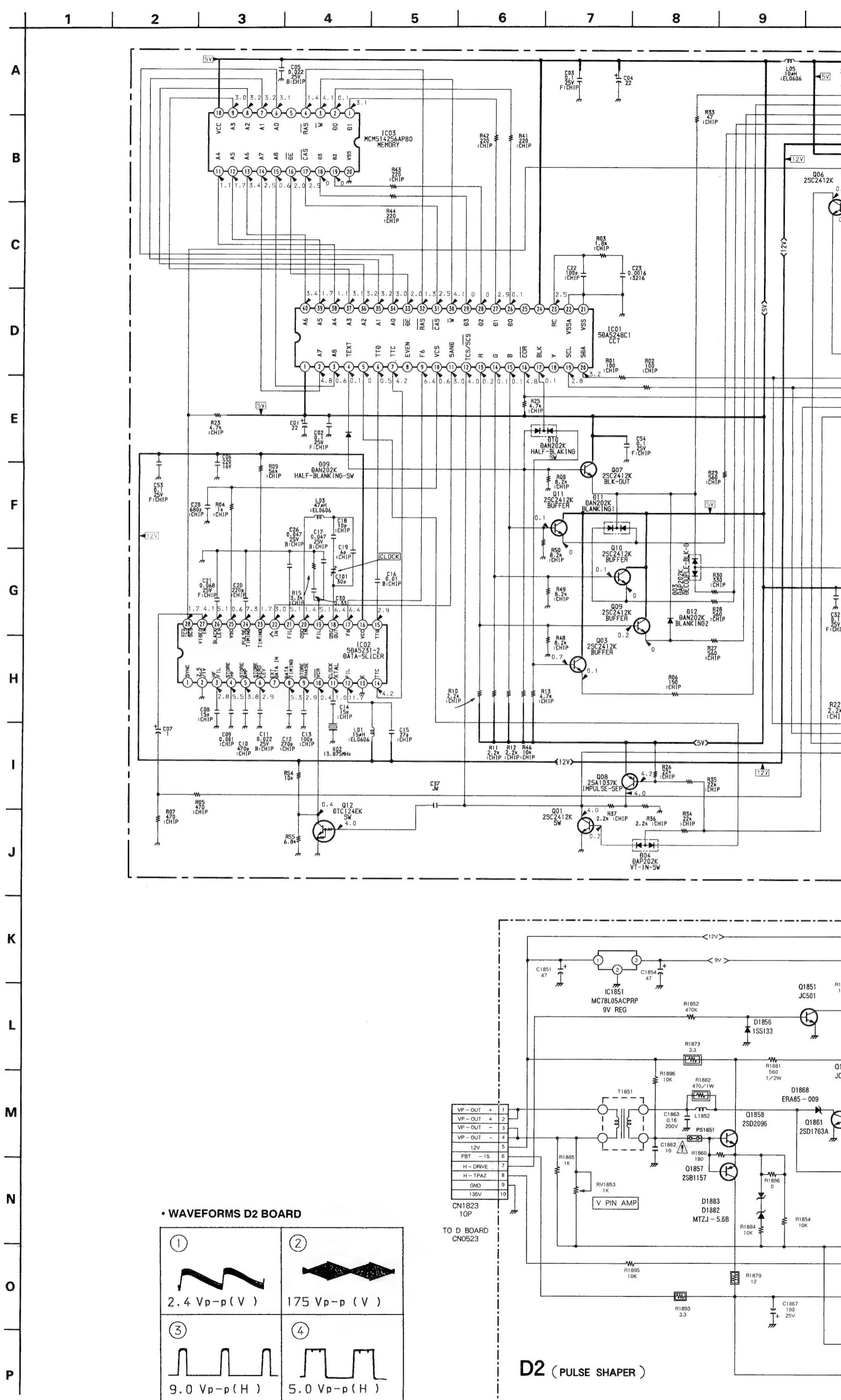


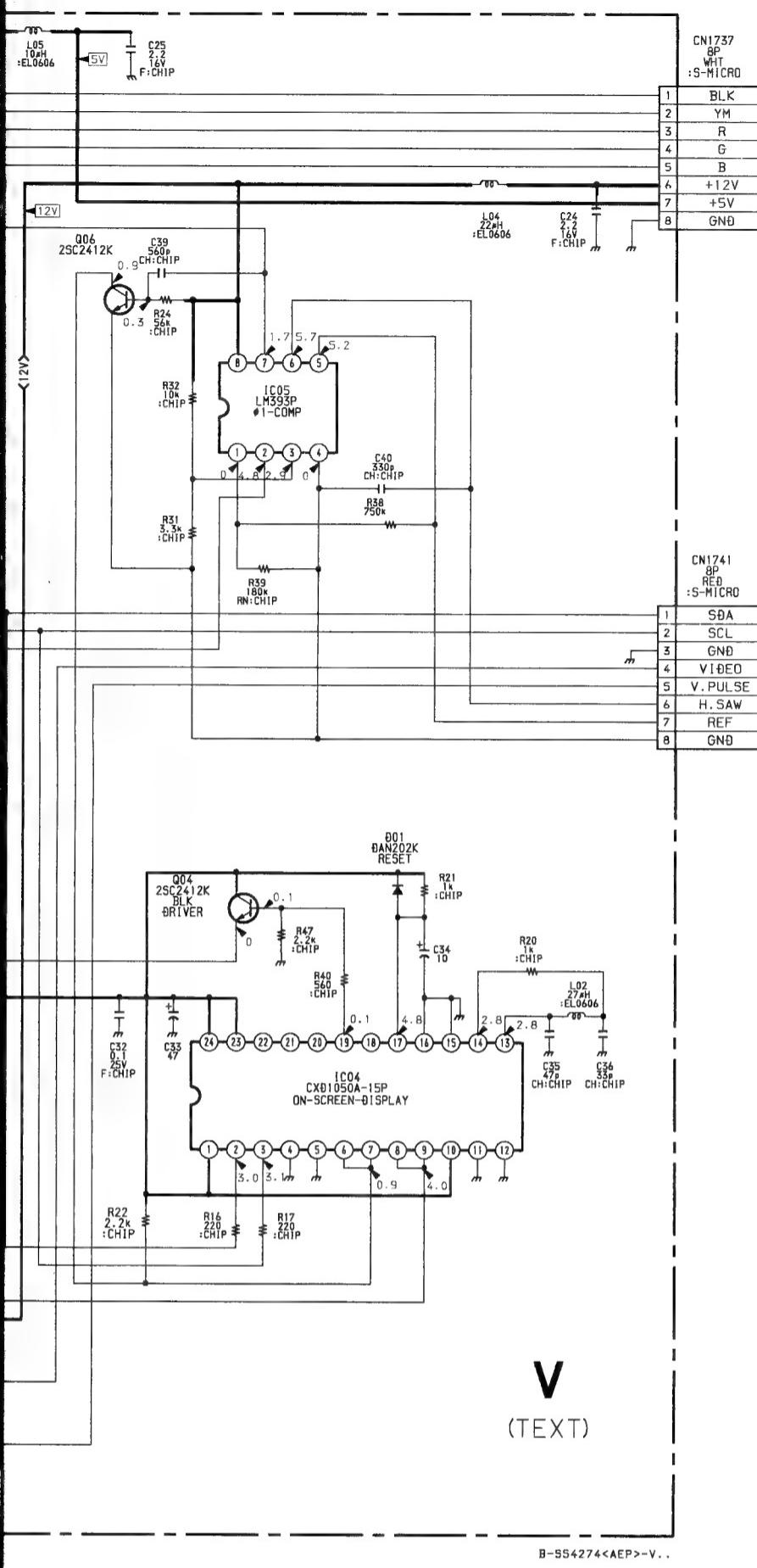
• WAVEFORMS D BOARD



• D BOARD IC601 TDA4605-3

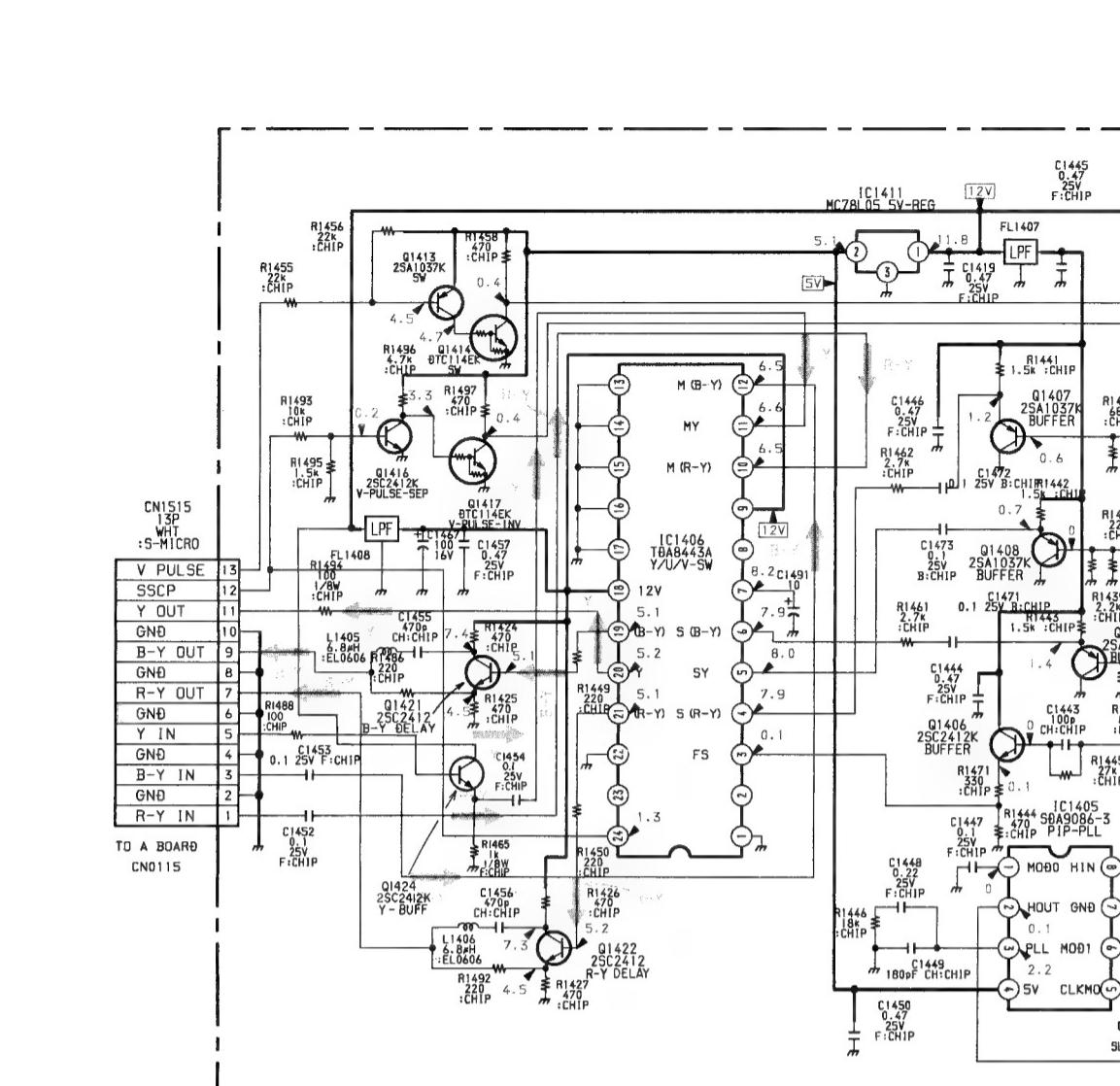
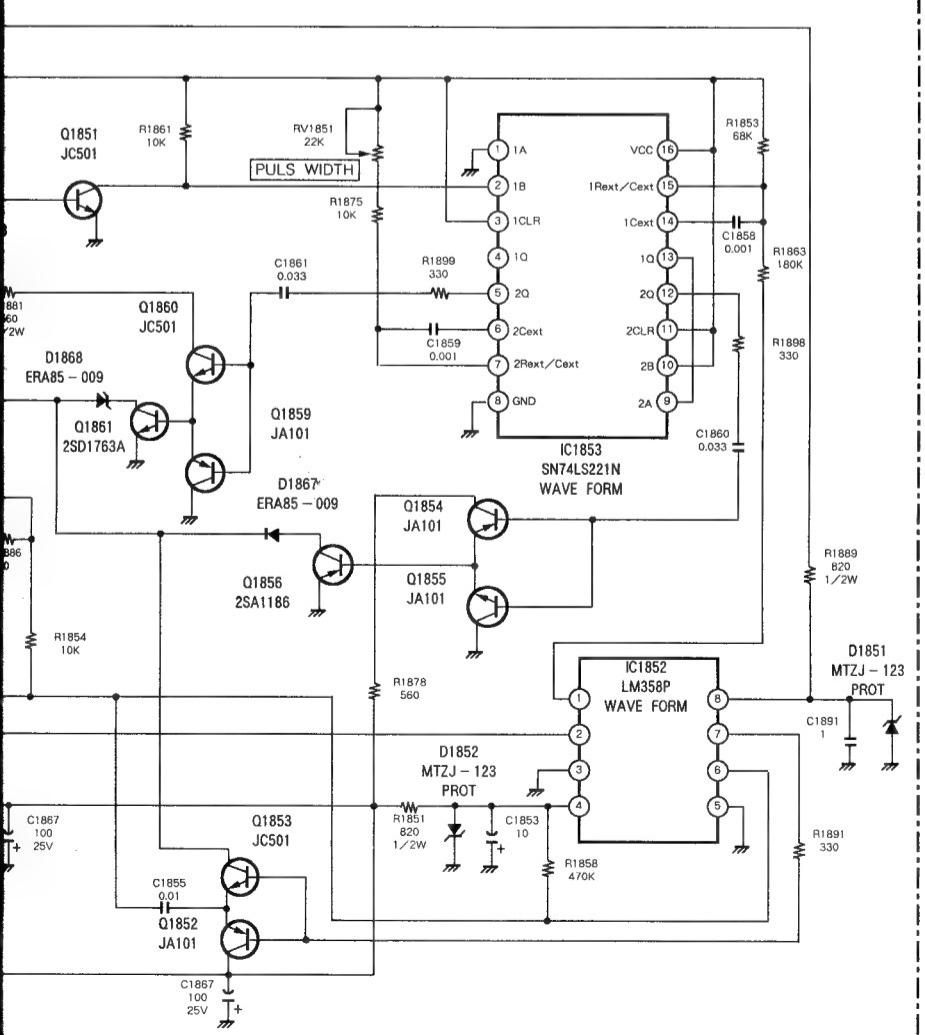




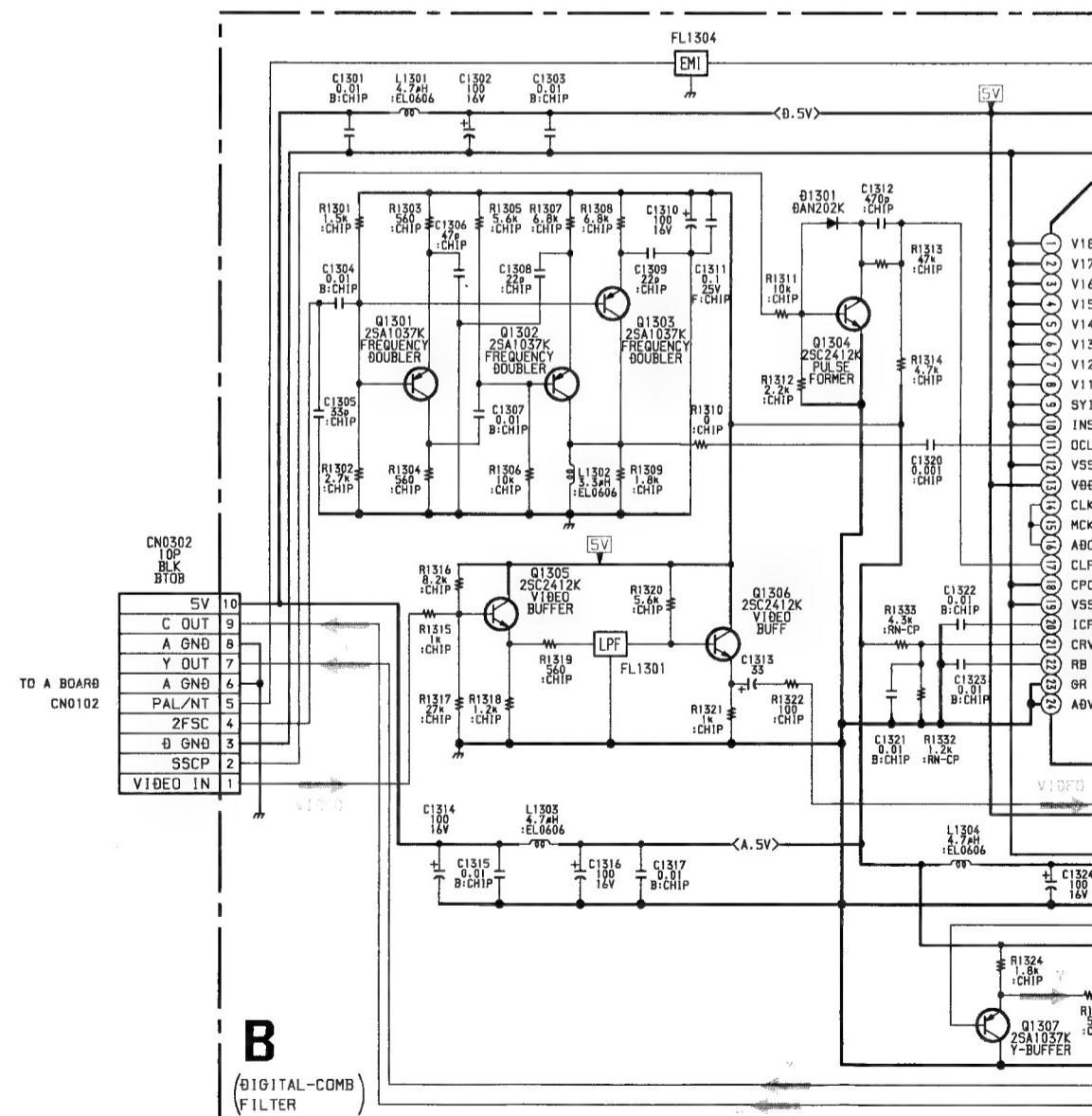


V
(TEXT)

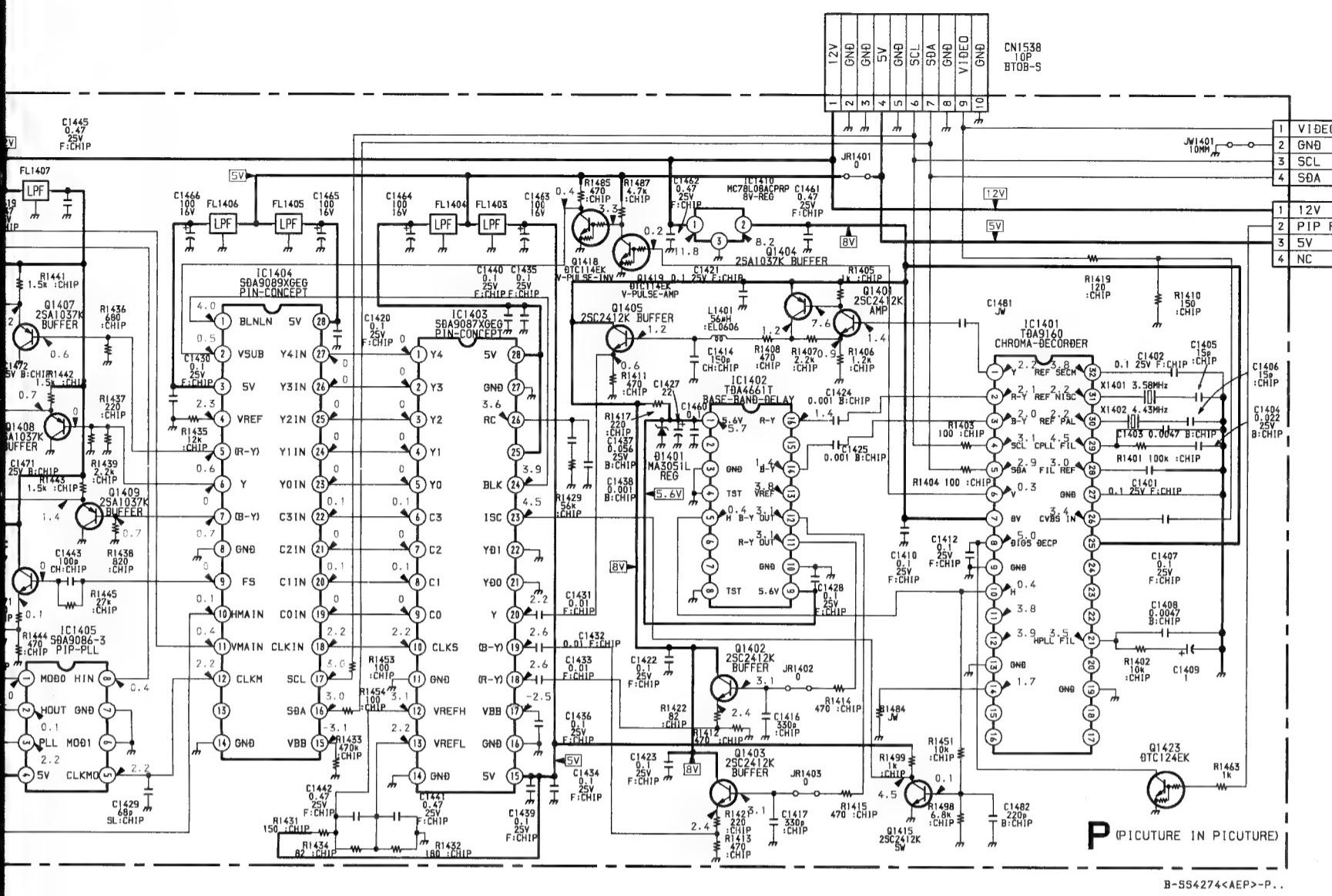
B-554274<AEPI>-V..



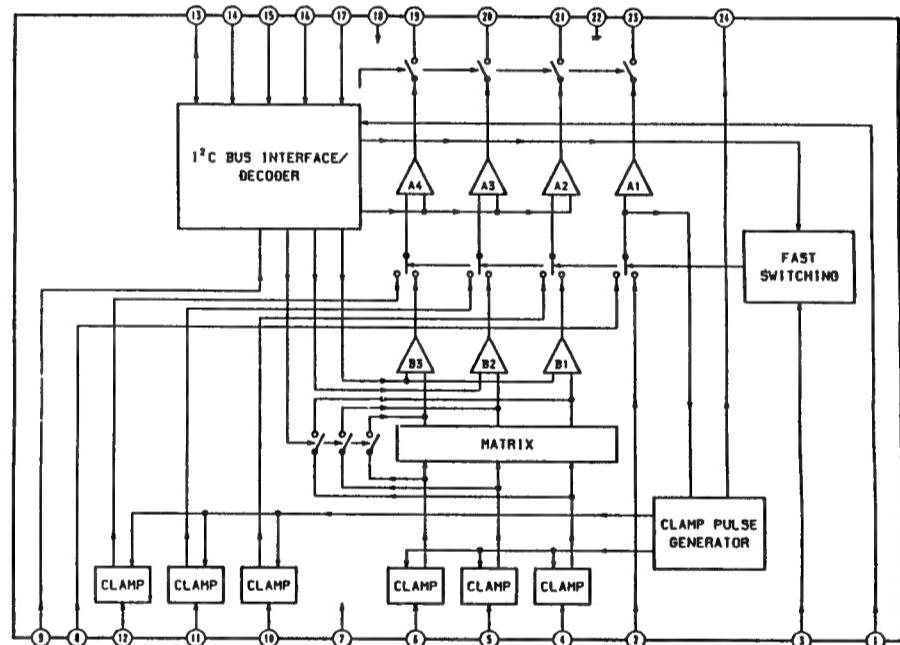
B-Y IN
GND
R-Y IN



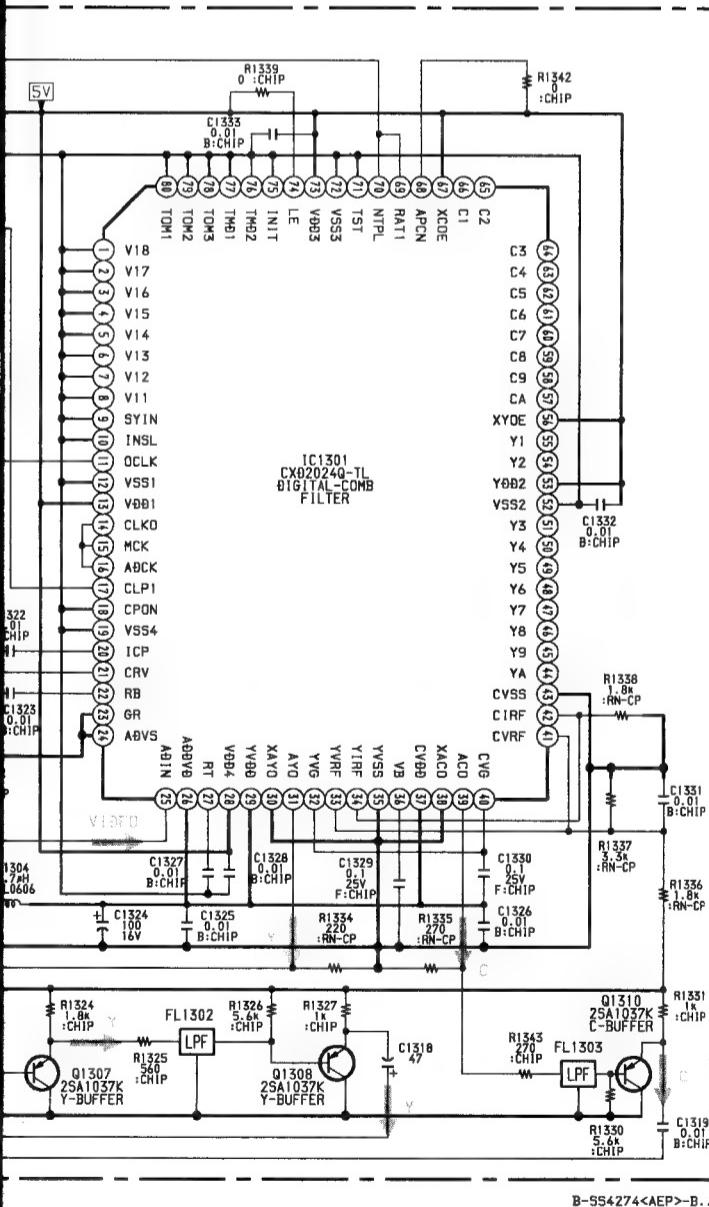
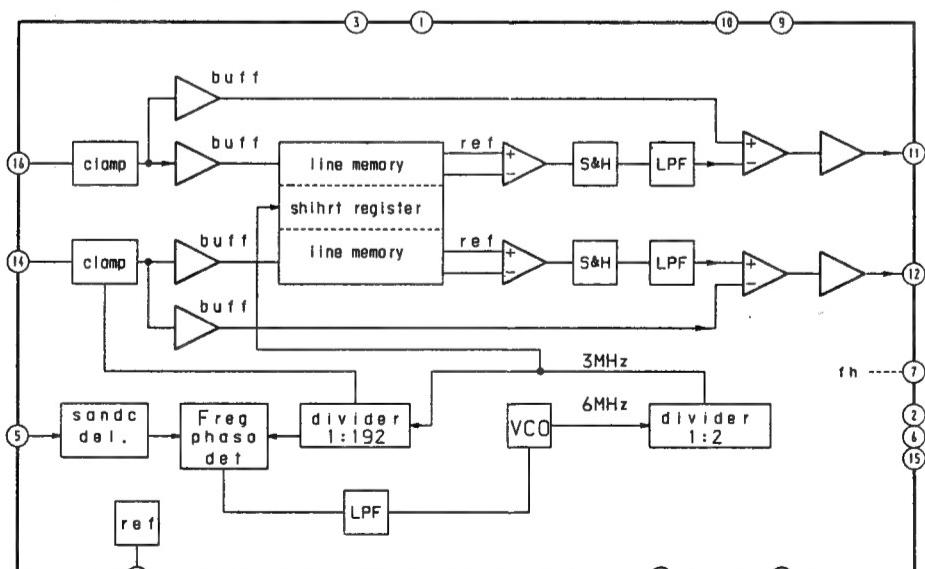
B
(DIGITAL-COM)
FILTER



• P BOARD IC1406 TDA8443A

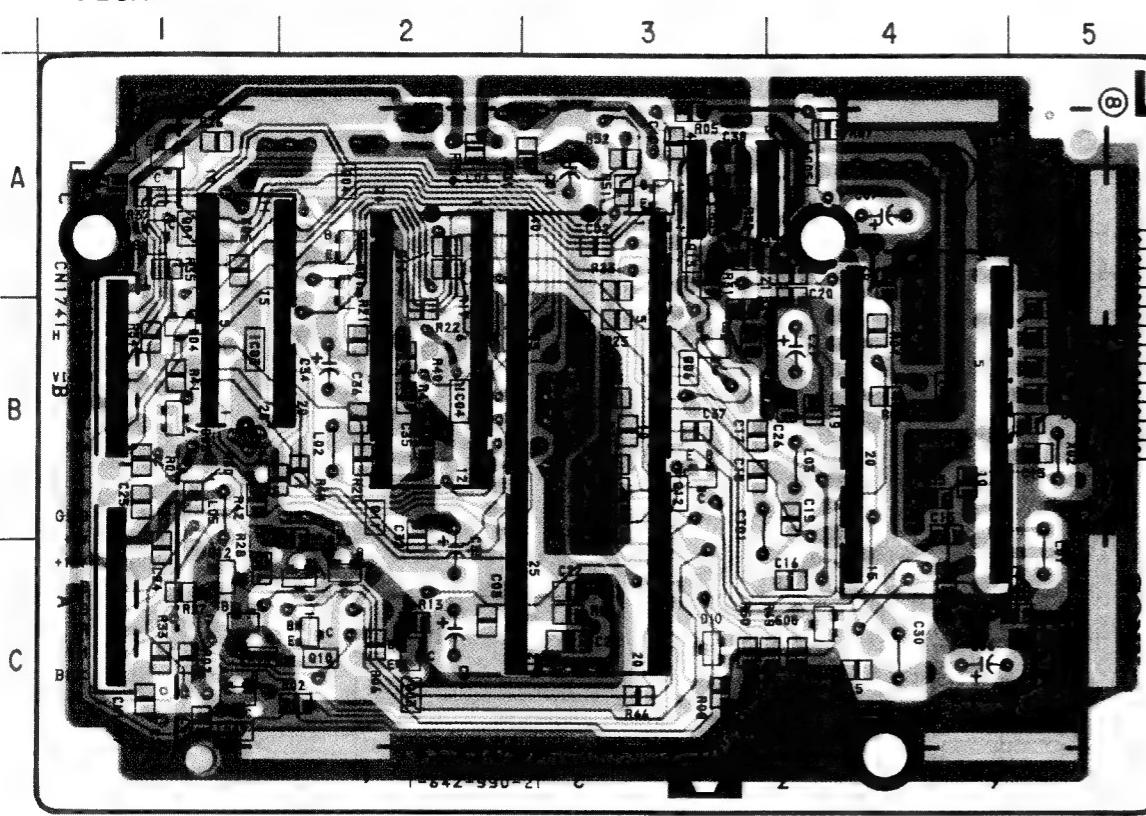


• P BOARD IC1402 TDA4660T

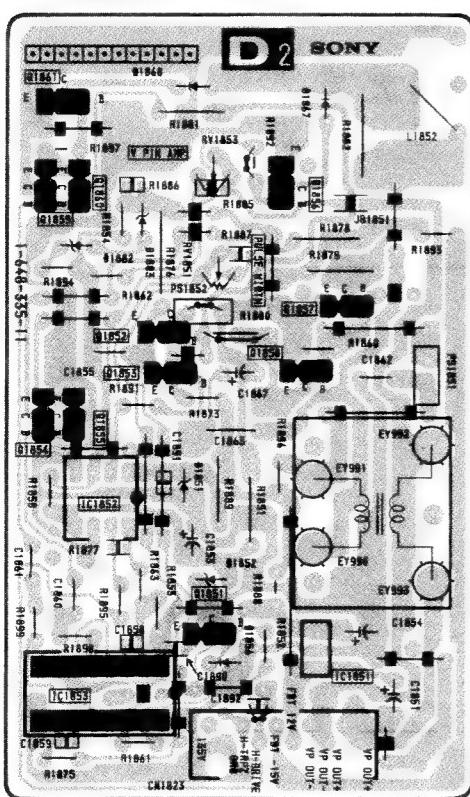


V [TEXT] **D2** [PULSE SHAPER] **P** [PICTURE IN PICTURE] **B** [DIGITAL COMB FILTER]

- V BOARD -



- D2 BOARD -



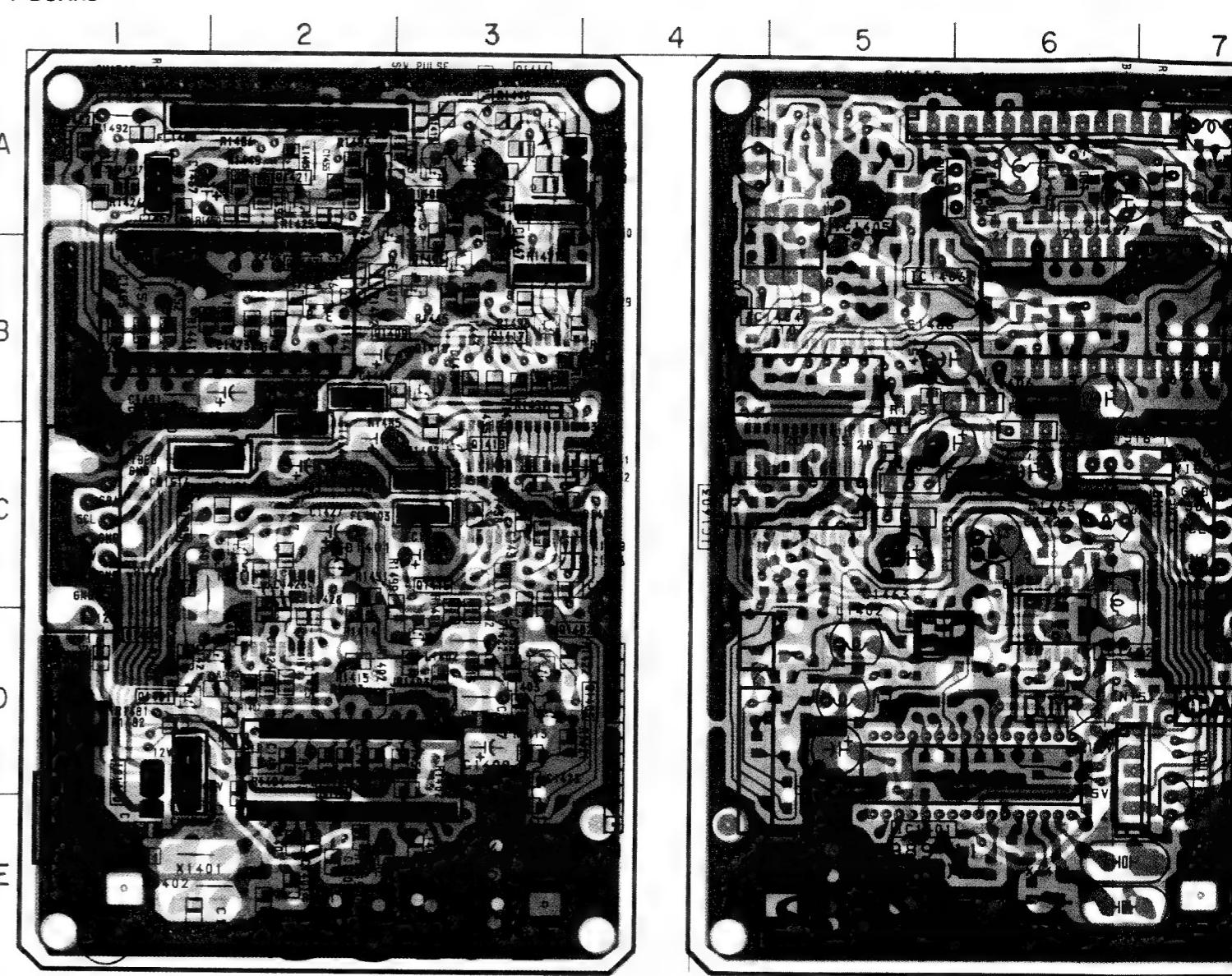
IC	DIODE
IC01	B - 3
IC02	B - 4
IC03	B - 1
IC04	B - 2
IC05	A - 4
	D01 A - 2
	D03 B - 1
	D04 B - 1
	D09 C - 4
	D010 C - 3
	D011 C - 2
	D012 C - 1

TRANSISTOR	TRIMMER
Q01 A - 1	CT01 B - 3
Q03 C - 2	
Q04 A - 2	
Q06 B - 3	
Q07 C - 1	
Q08 A - 1	
Q09 C - 1	
Q010 C - 2	
Q011 B - 2	
Q012 B - 3	

Note :

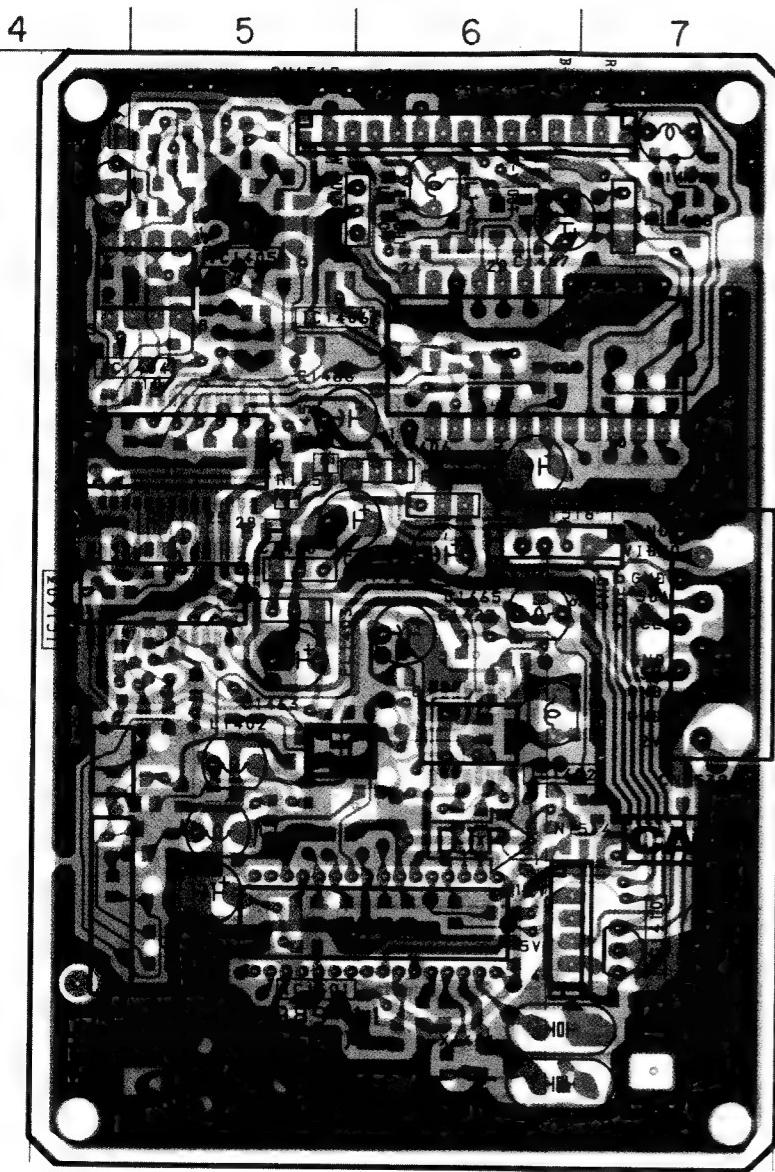
- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

- P BOARD -



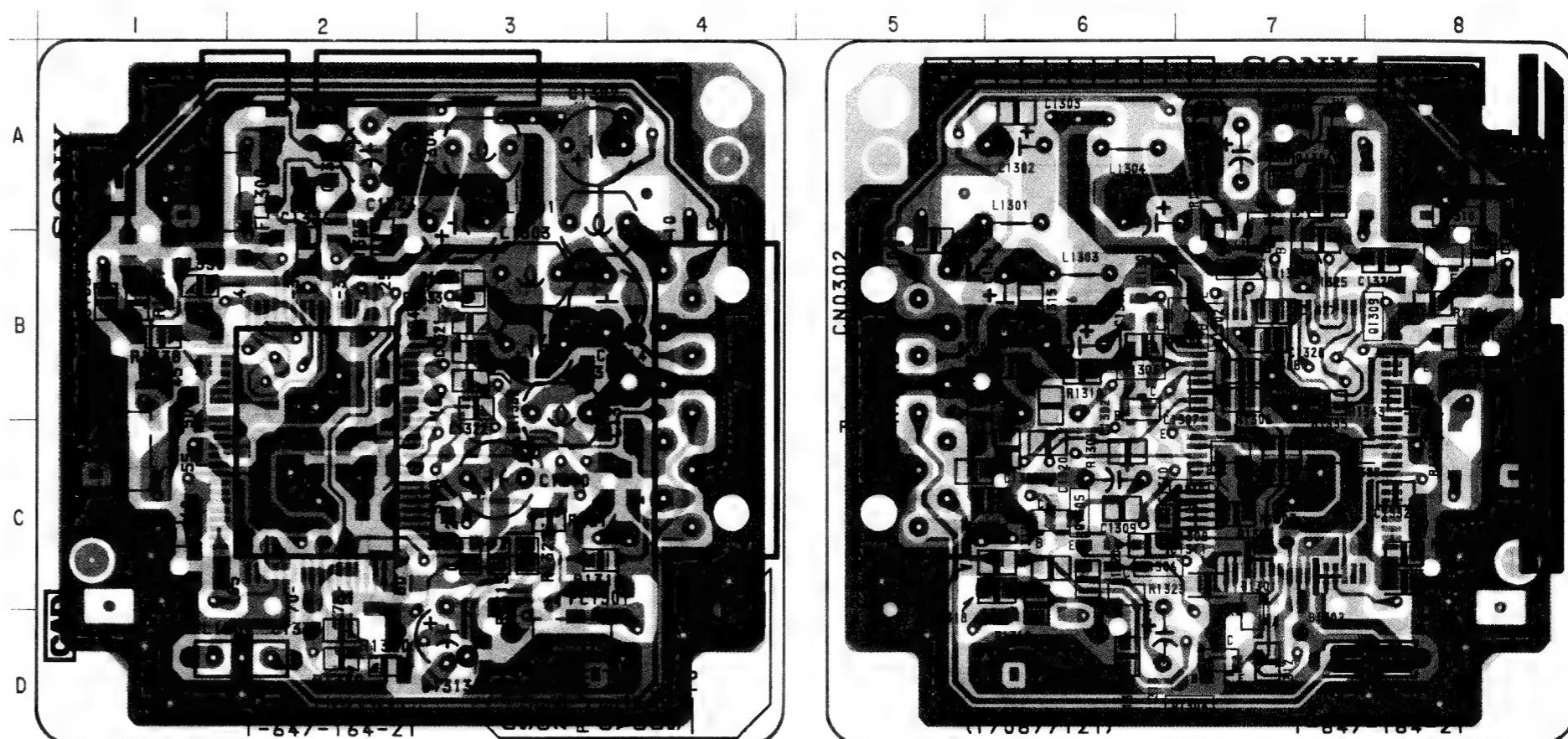
Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.



IC	
IC1401	D - 2
IC1402	D - 6
IC1403	C - 5
IC1404	B - 5
IC1405	B - 3
IC1406	B - 2
IC1410	D - 1
IC1411	A - 3
TRANSISTOR	
Q1401	D - 1
Q1402	D - 3
Q1403	D - 3
Q1404	D - 2
Q1405	C - 2
Q1406	B - 3
Q1407	A - 2
Q1408	A - 3
Q1409	B - 3
Q1413	A - 3
Q1414	A - 3
Q1415	D - 3
Q1416	A - 3
Q1417	B - 3
Q1418	B - 3
Q1419	C - 3
Q1421	A - 2
Q1422	A - 1
DIODED	
D1401	C - 2

- B BOARD -



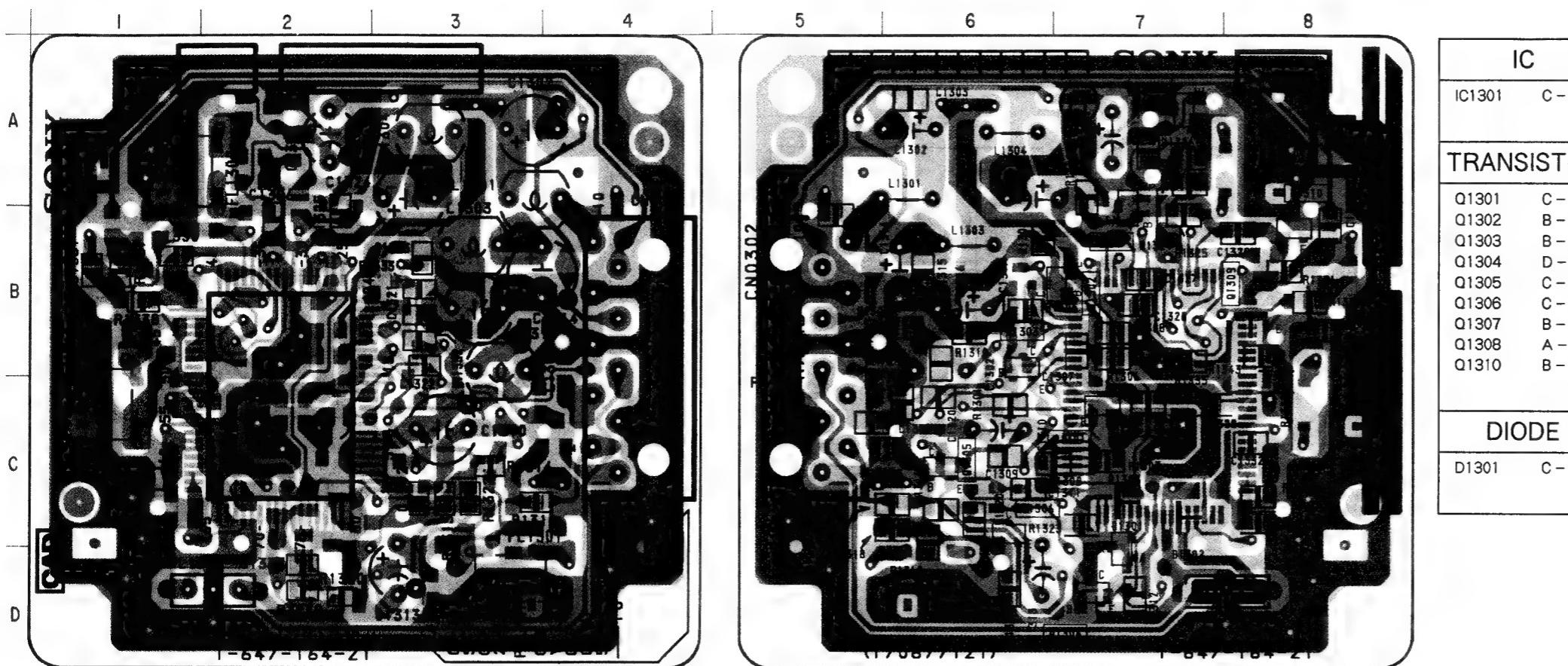
Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

- B BOARD -



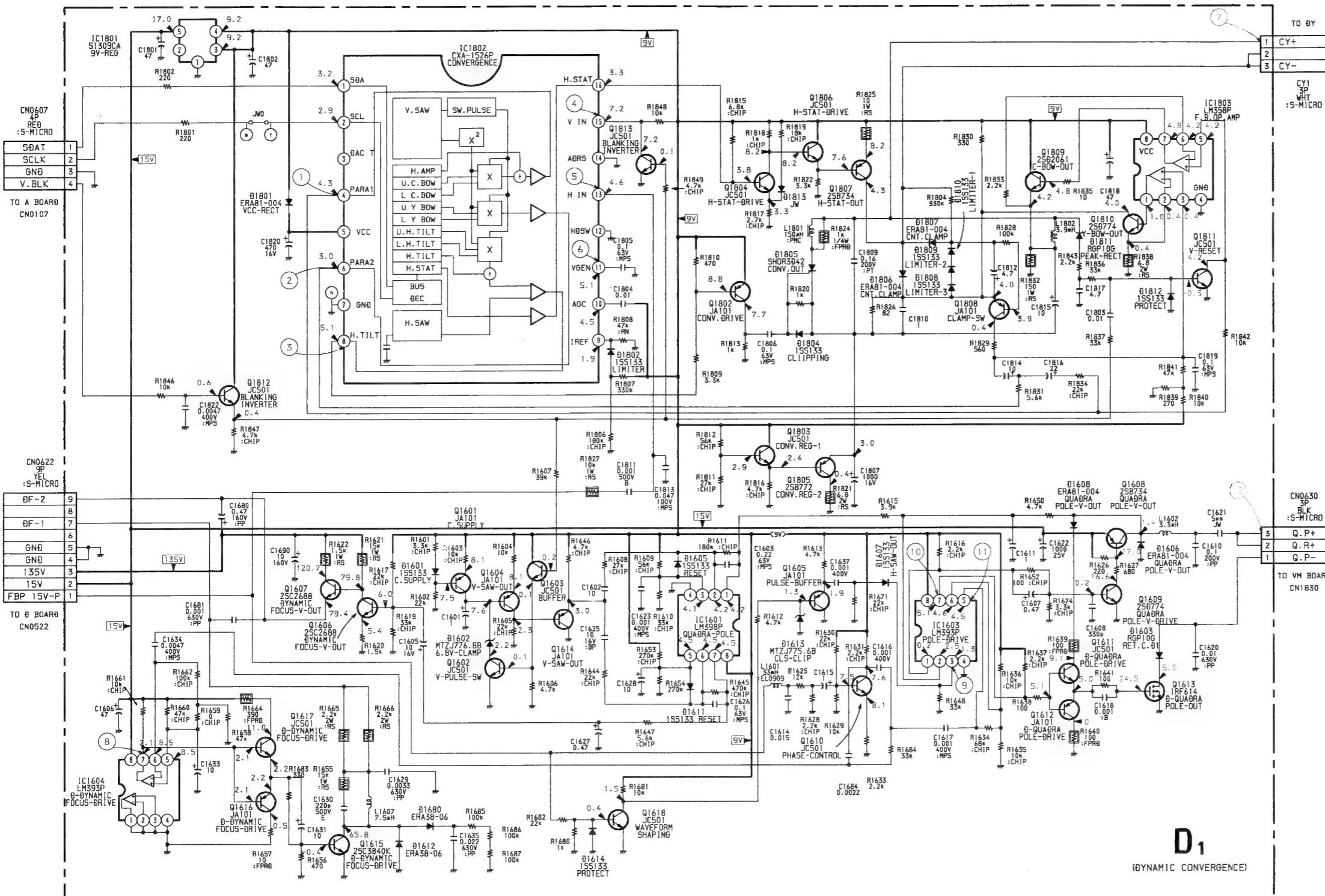
IC
IC1301 C - 2
TRANSISTOR
Q1301 C - 7
Q1302 B - 7
Q1303 B - 6
Q1304 D - 7
Q1305 C - 6
Q1306 C - 6
Q1307 B - 7
Q1308 A - 7
Q1310 B - 8
DIODE
D1301 C - 7

Note :

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.

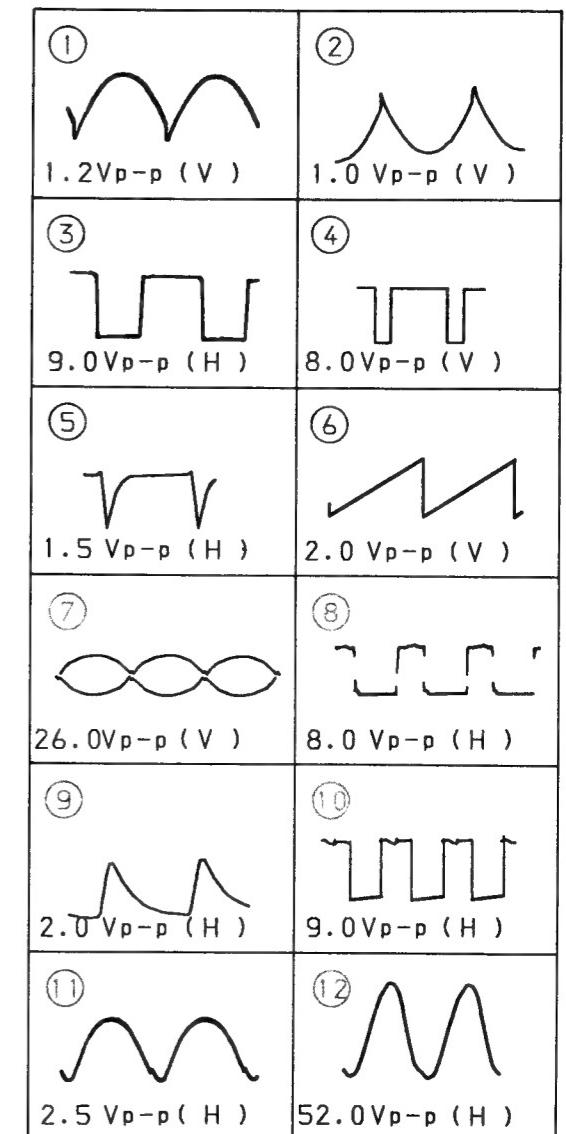
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

A



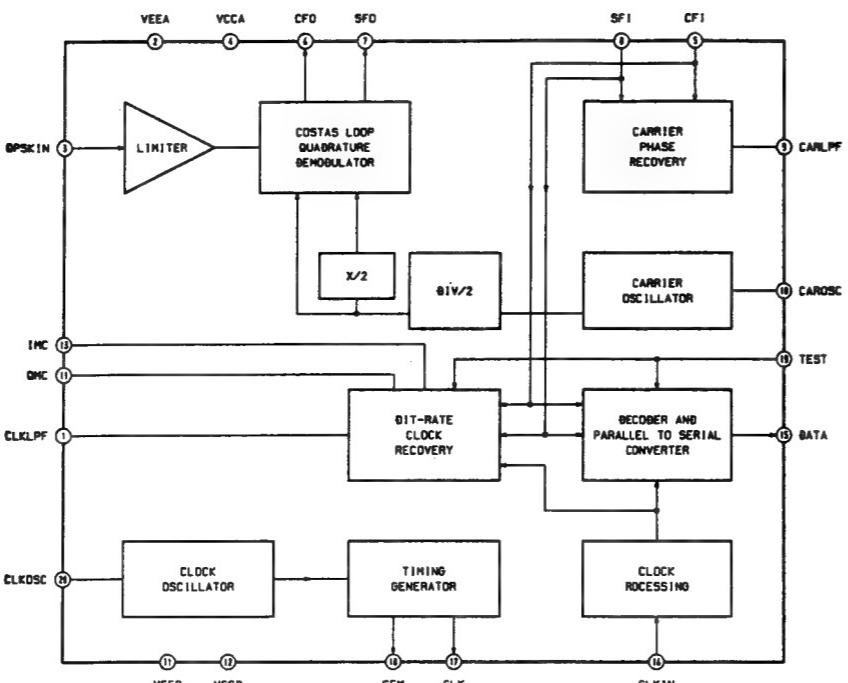
B-SS4274<AEPE>-01.

• WAVEFORMS D1 BOARD

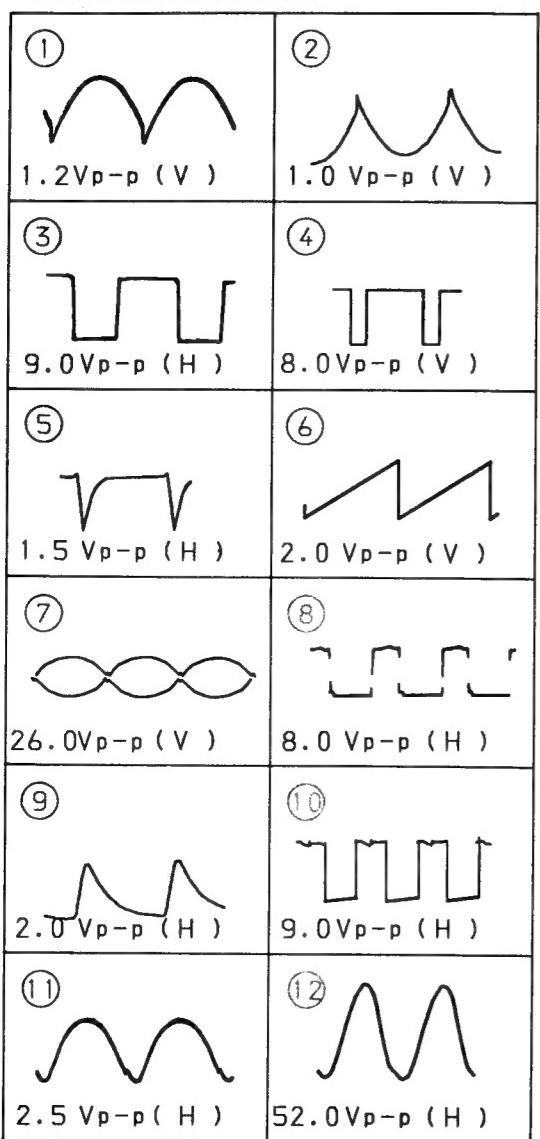


13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

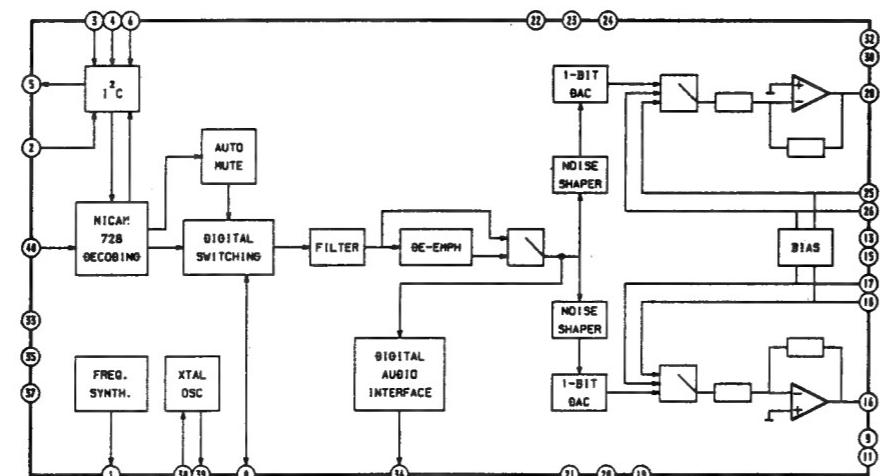
• A1 BOARD IC1101 TDA8732



• WAVEFORMS D1 BOARD



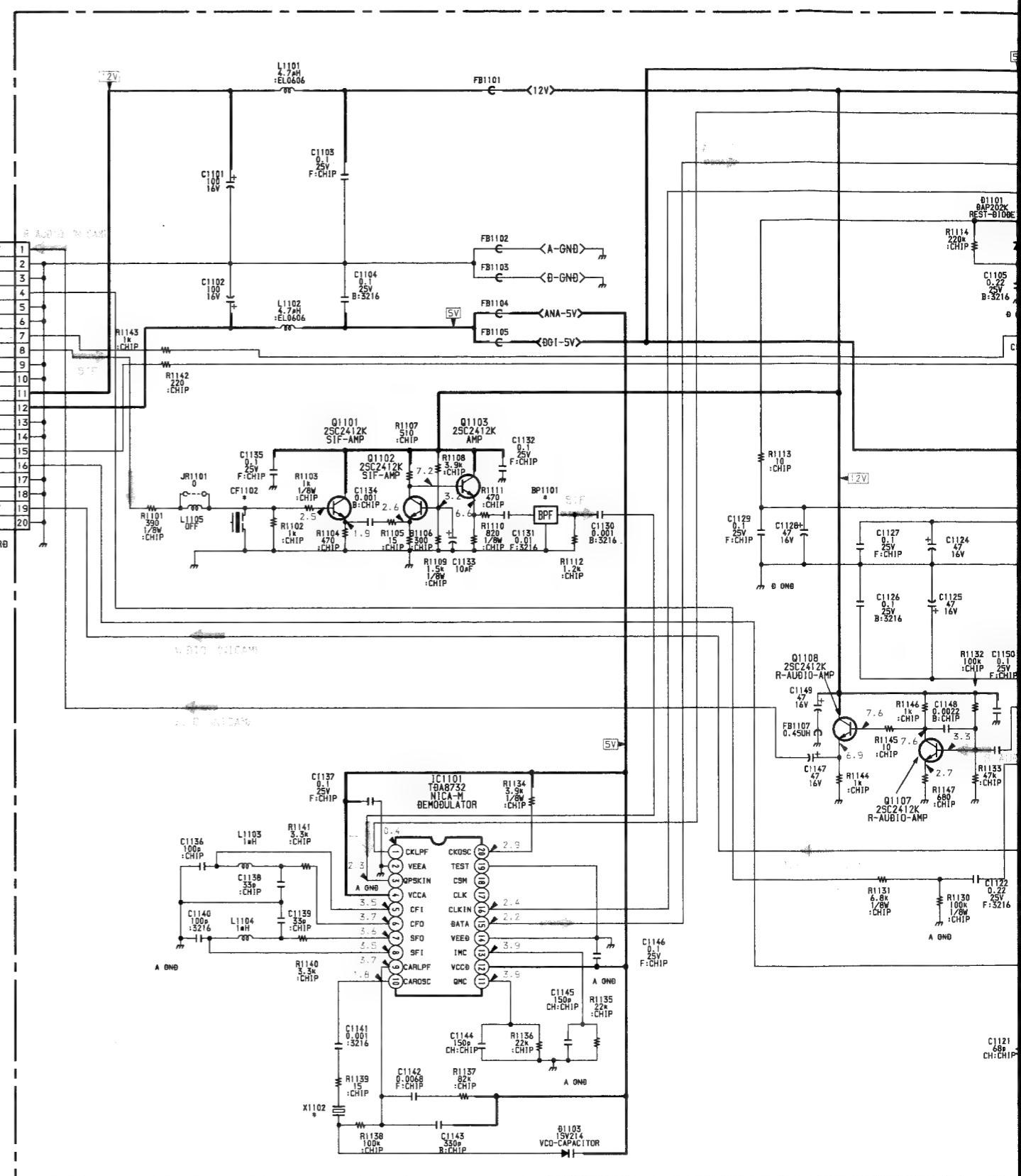
• A1 BOARD IC1102 SAA7282P



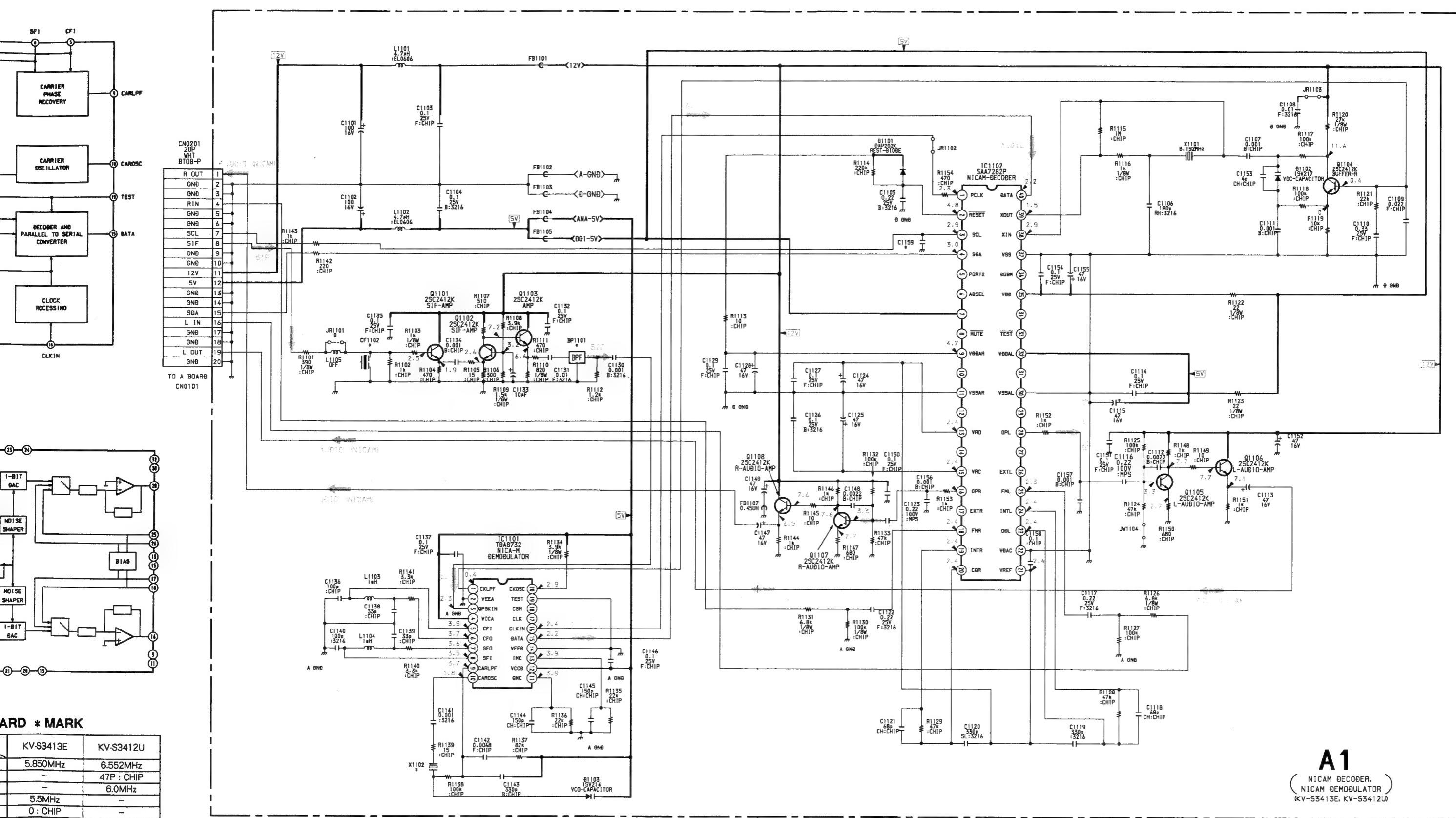
A1 BOARD * MARK

	KV-S3413E	KV-S3412U
BP1101	5.850MHz	6.552MHz
C1159	—	47P : CHIP
CF1101	—	6.0MHz
CF1102	5.5MHz	—
JR1101	0 : CHIP	—
L1105	—	15 μ H
X1102	11.700MHz	13.104MHz

KV-S3412U/S3413E only



KV-S3412U/S3413E only



ARD * MARK

KV-S3413E	KV-S3412U
5.850MHz	6.552MHz
-	47P : CHIP
-	6.0MHz
5.5MHz	-
0 : CHIP	-
-	15 μH
11.700MHz	13.104MHz

A1

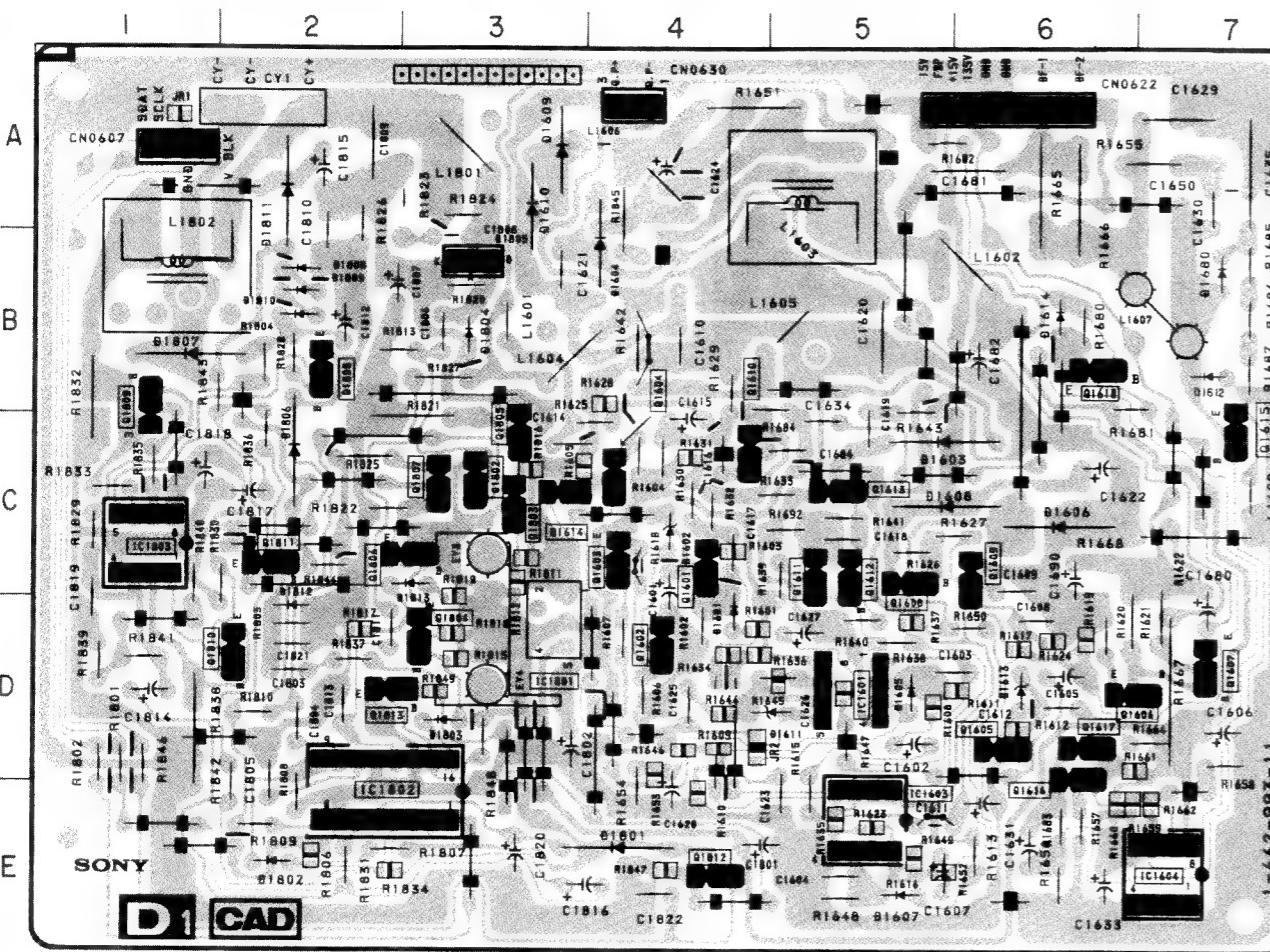
(NICAM DECODER,
NICAM DEMODULATOR
KV-S3413E, KV-S3412U)

B-SS4274<AEPI>-A1

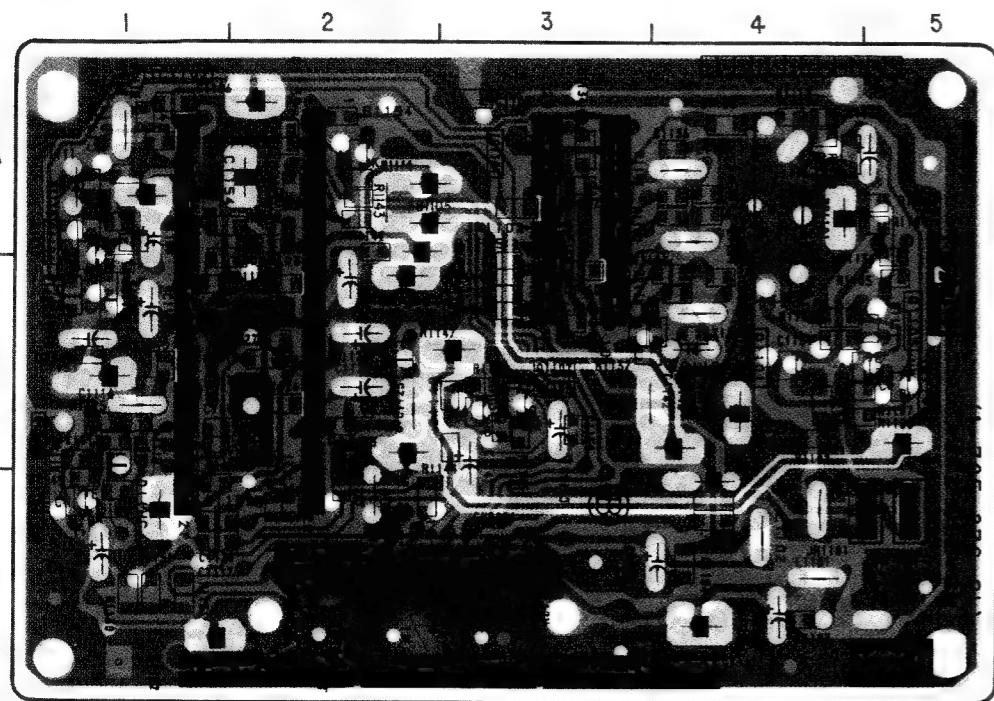
D1 DYNAMIC CONVERGENCE **A1** NICA NICA

A1 [NICAM DECODER,
NICAM DEMODULATOR] **KV-S3412U/S3413E only**

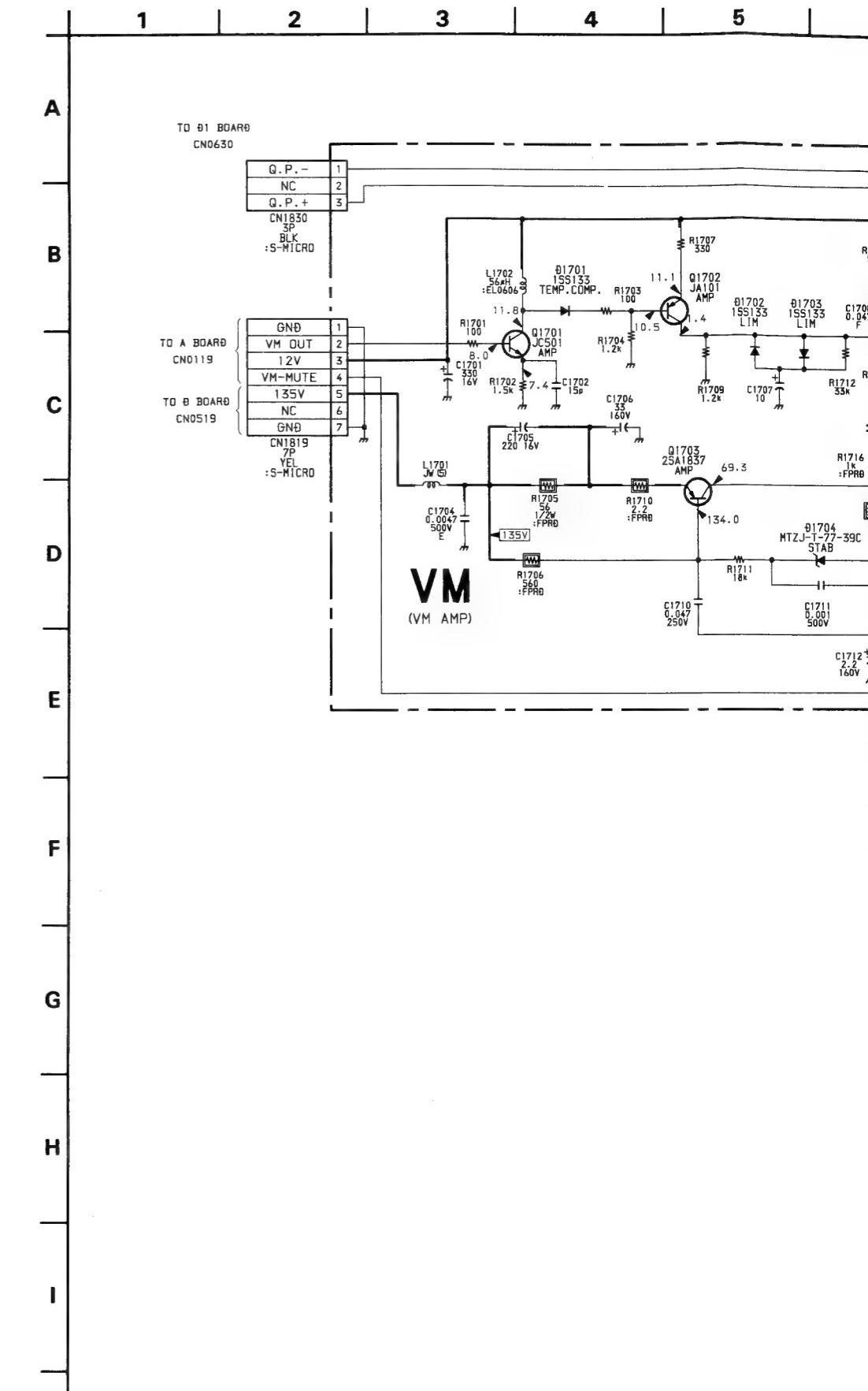
- D1 BOARD -



- A1 BOARD - (KV-S3412U/S3413E only)

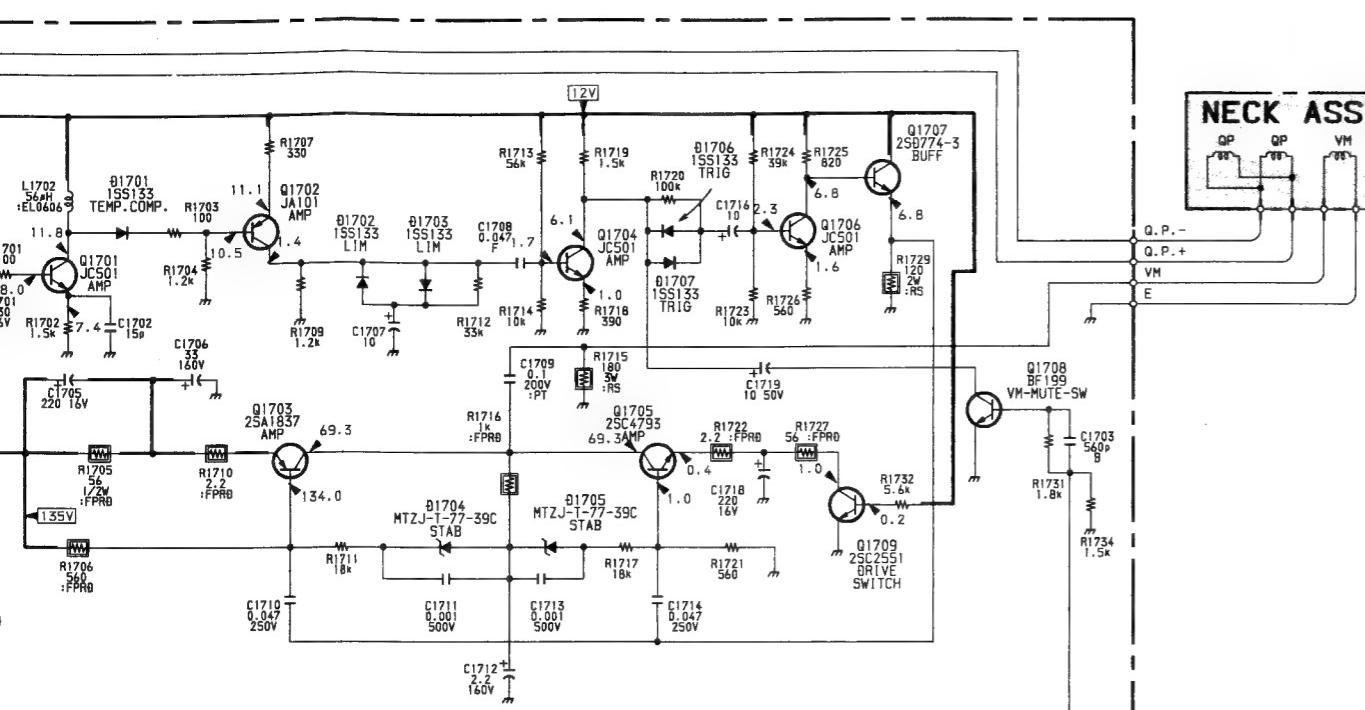


IC		Q1807 C - 3	
IC1601	D - 5	Q1808	B - 2
IC1603	E - 5	Q1809	B - 1
IC1604	E - 7	Q1810	D - 2
IC1801	D - 3	Q1811	C - 2
IC1802	E - 2	Q1812	E - 4
IC1803	C - 1	Q1813	D - 2
DIODE			
TRANSISTOR		D1601	D - 4
Q1601	C - 4	D1602	C - 4
Q1602	D - 4	D1603	C - 5
Q1603	C - 4	D1605	D - 5
Q1604	C - 4	D1606	C - 6
Q1605	D - 6	D1607	D - 5
Q1606	D - 6	D1608	C - 5
Q1607	D - 7	D1611	D - 5
Q1608	C - 5	D1612	B - 7
Q1609	C - 6	D1613	D - 6
Q1610	C - 4	D1614	B - 6
Q1611	C - 5	D1680	B - 7
Q1612	C - 5	D1801	E - 4
Q1613	C - 5	D1802	E - 2
Q1614	C - 3	D1804	B - 3
Q1615	C - 7	D1805	B - 3
Q1616	D - 6	D1806	C - 2
Q1617	D - 6	D1807	B - 1
Q1618	B - 6	D1808	B - 2
Q1802	C - 3	D1809	B - 2
Q1803	C - 3	D1810	B - 2
Q1804	D - 3	D1811	A - 2
Q1805	C - 3	D1812	D - 2
Q1806	C - 3	D1813	C - 3

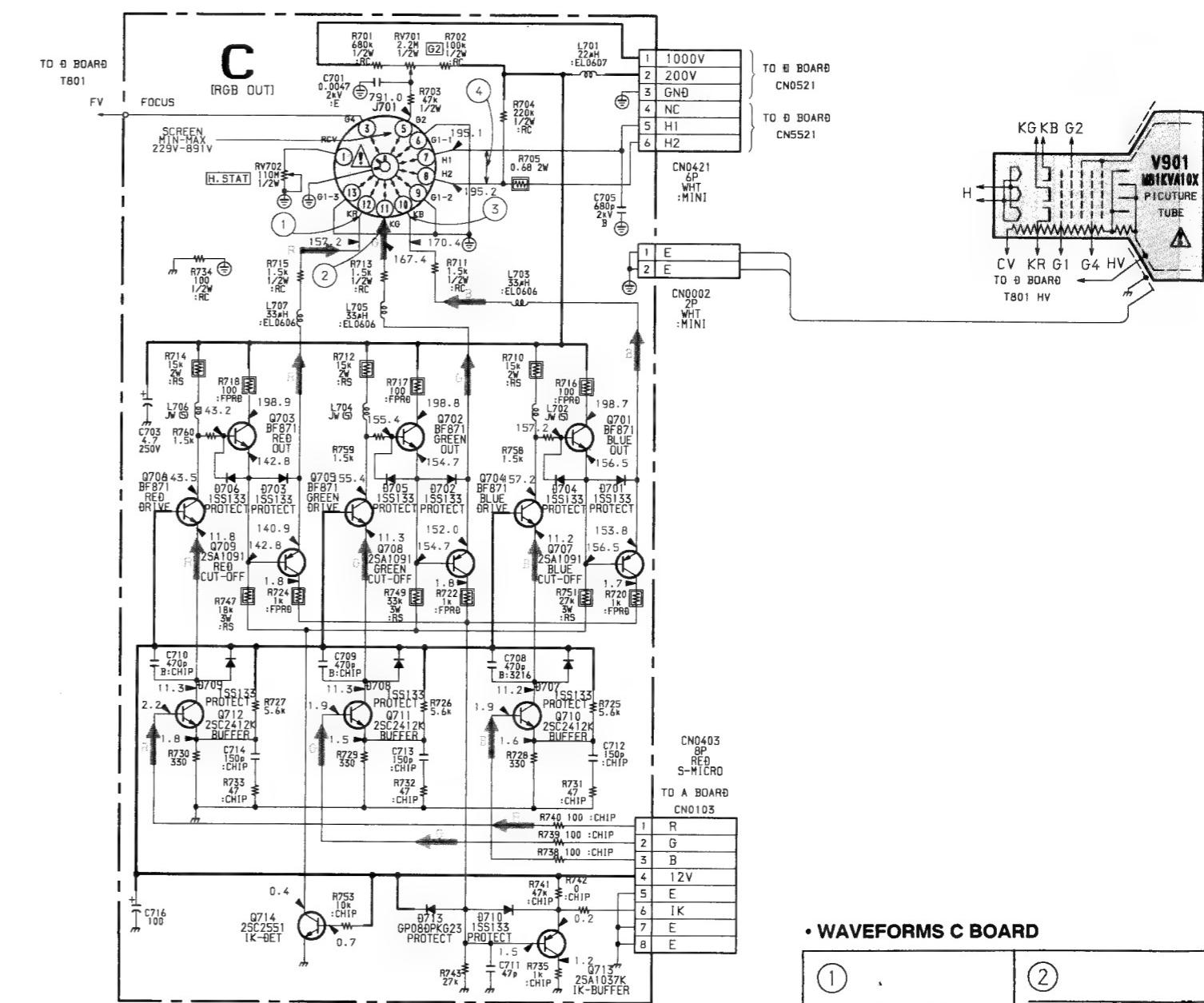


Note

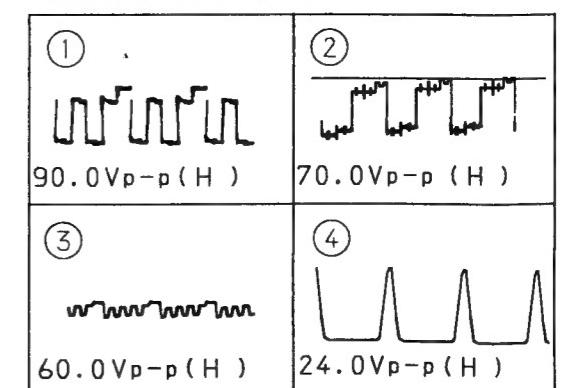
- : Pattern from the side which enables seeing
 - : Pattern of the rear side.



R-554276<AFB>-



• WAVEFORMS C BOARD



8

9

10

11

12

13

14

15

16

17

18

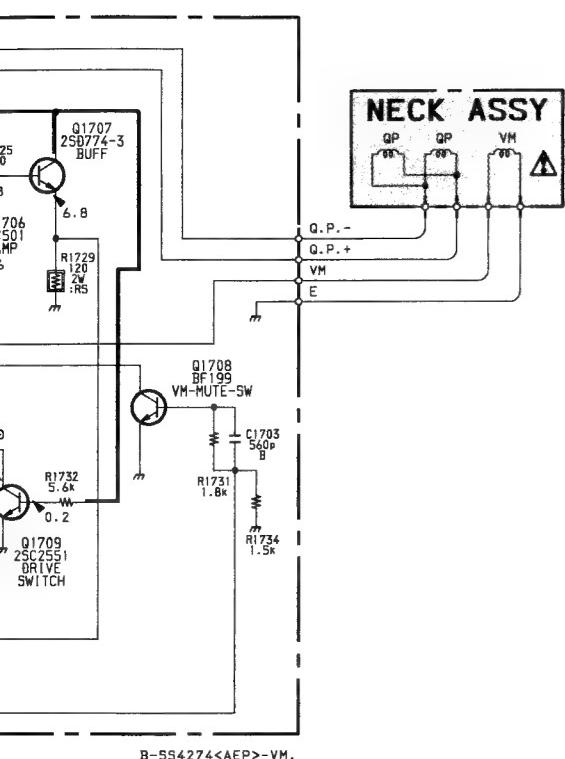
19

VM

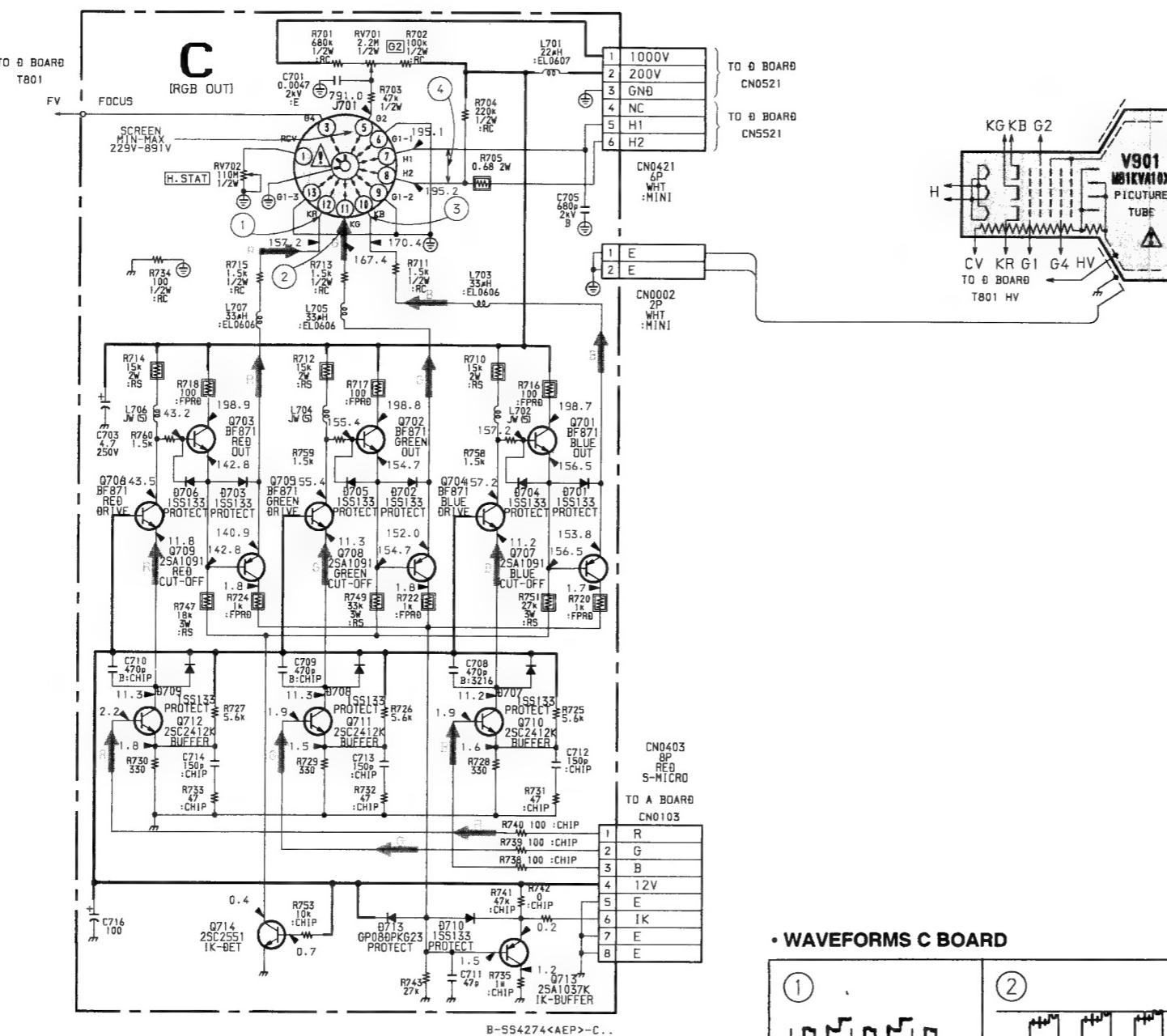
[VM AMP]

C

[R. G. B OUT]

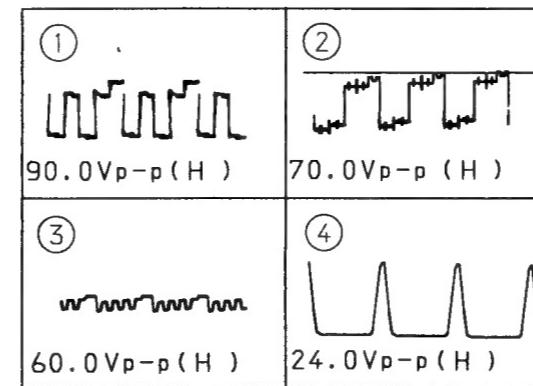


B-554274<AEP>-VM.

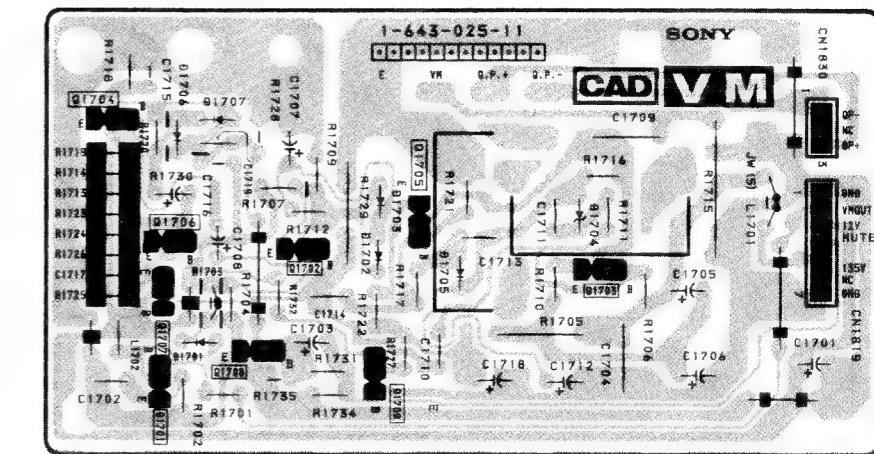


B-554274<AEP>-C..

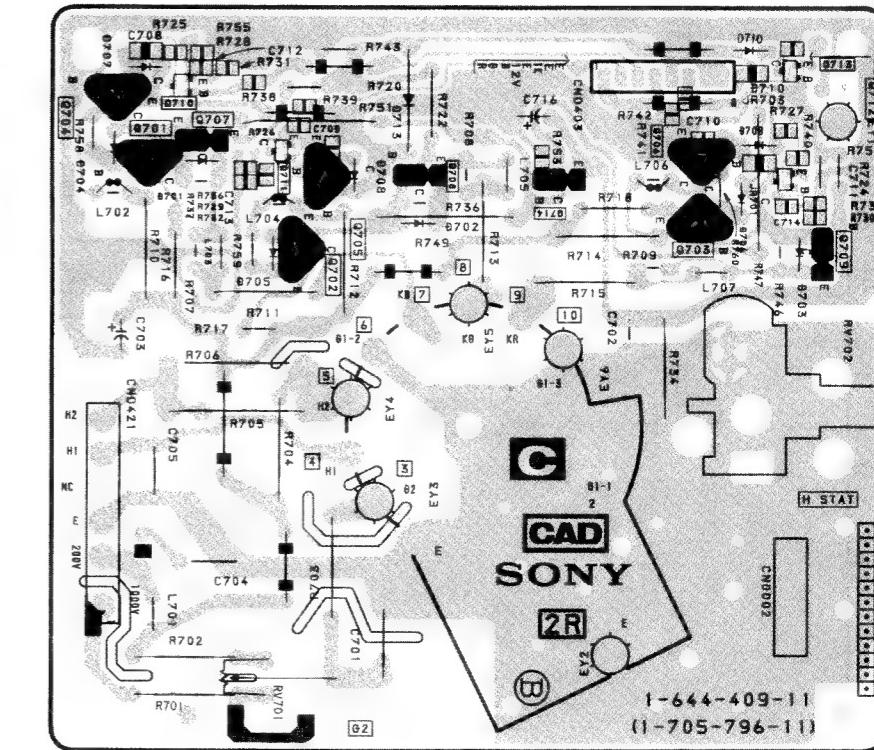
• WAVEFORMS C BOARD



- VM BOARD -

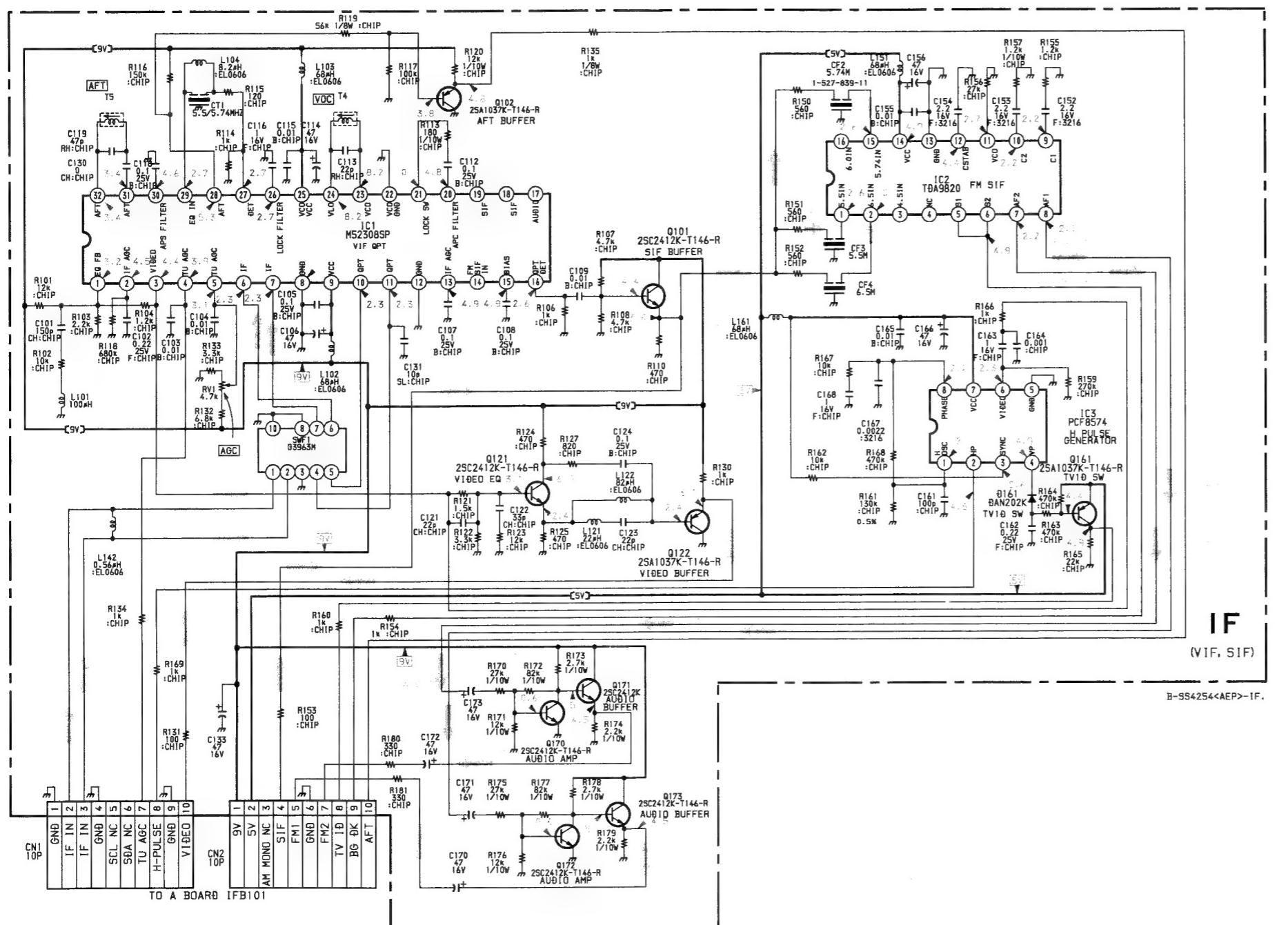


- C BOARD -

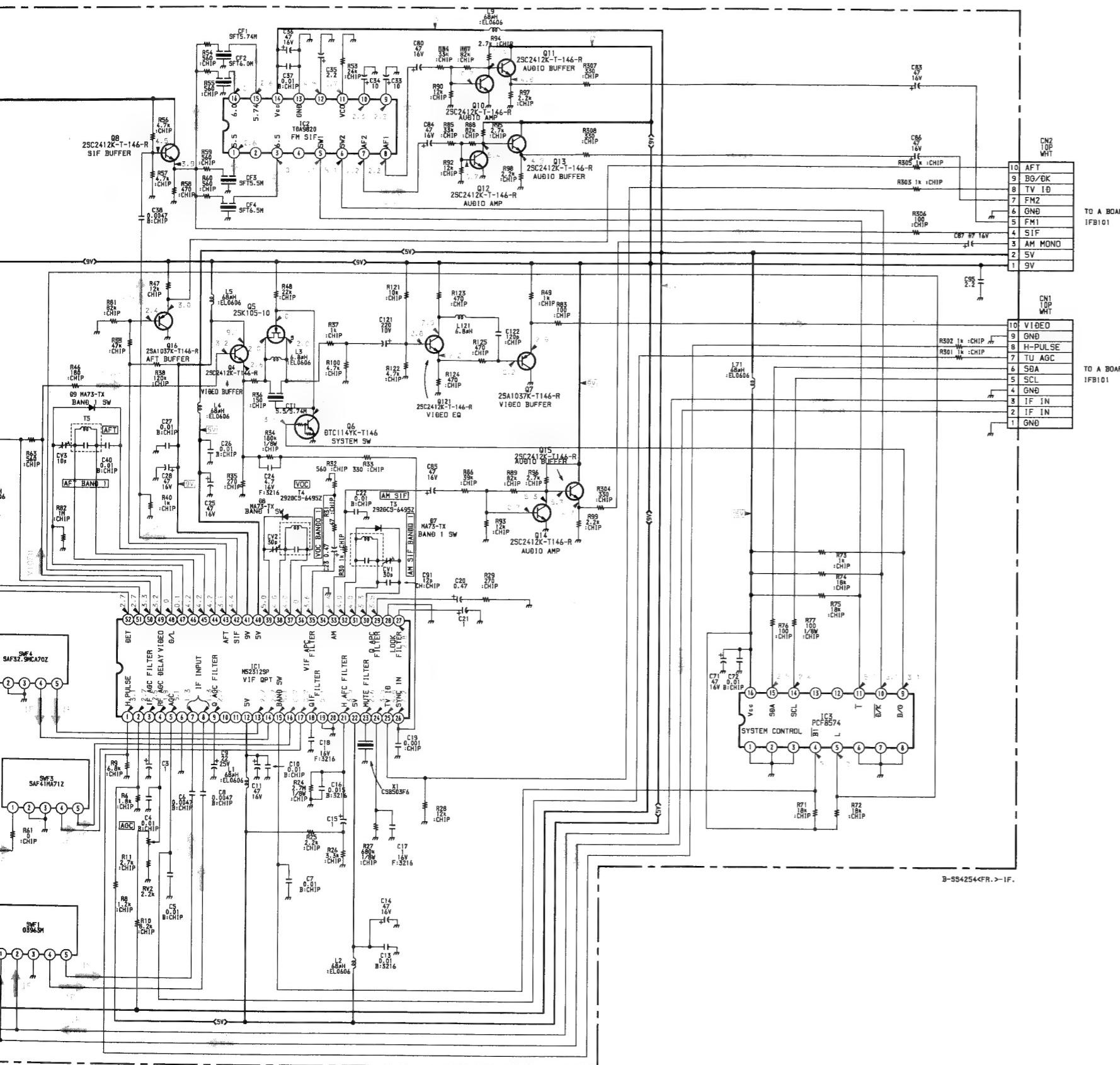


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

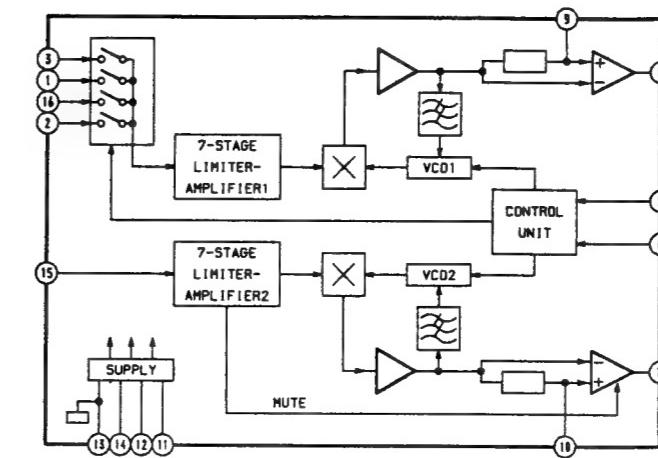
IFH395 (KV-S3411D/S3413E only)



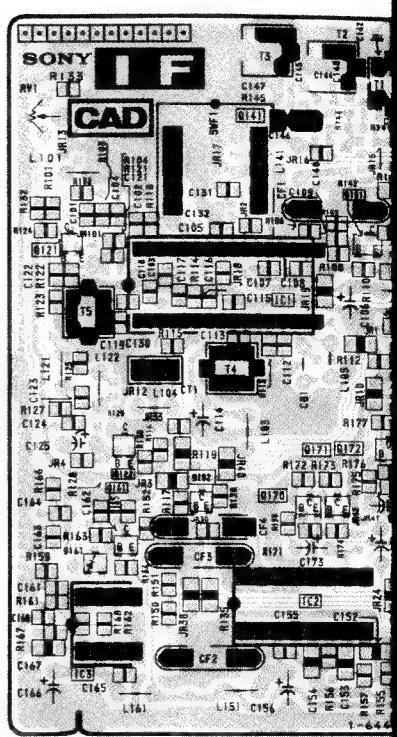
14 15 16 17 18 19 20 21 22 23



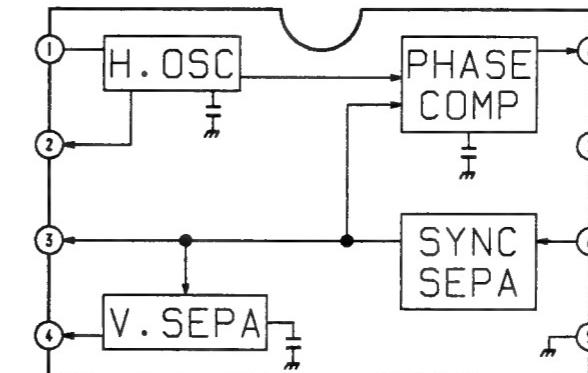
• IF BOARD IC2 TDA9820 (KV-S3411D/S3413E)



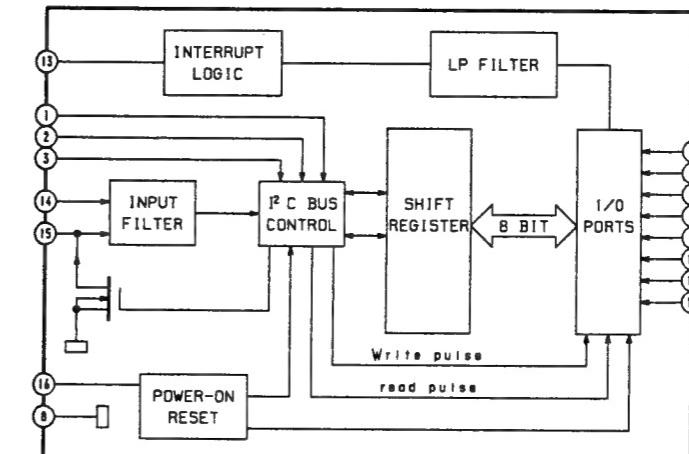
• IF BOARD – (KV-S3411D/S3413E)

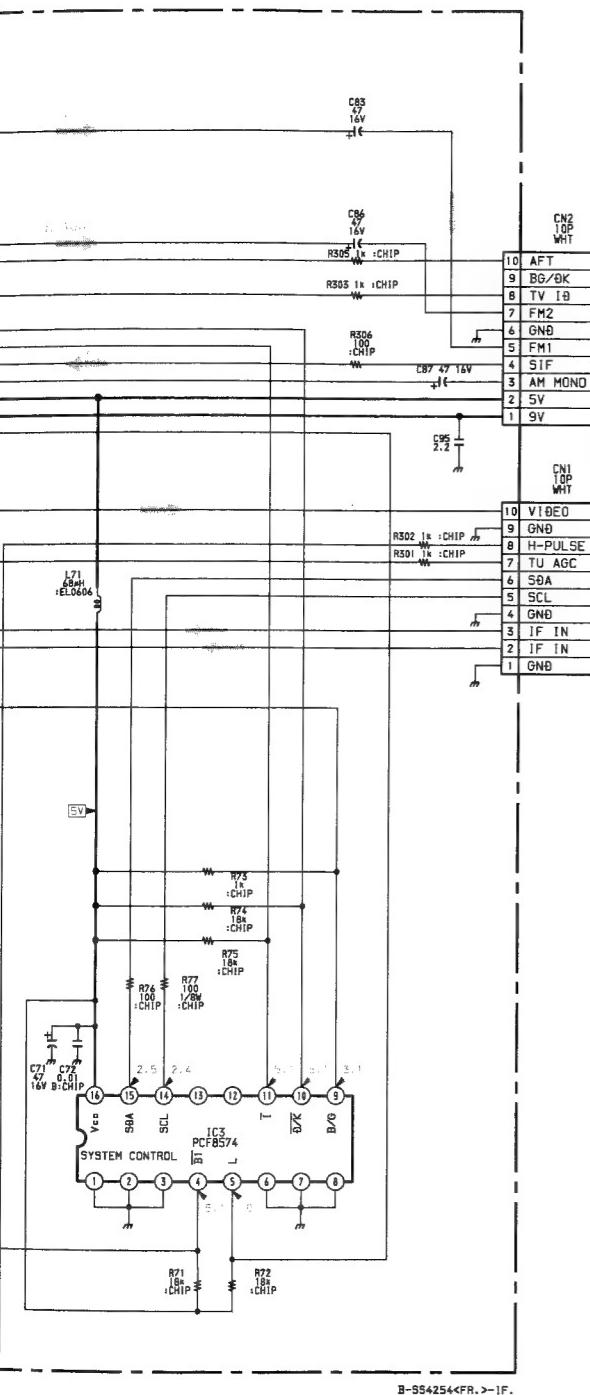


• IF BOARD IC3 BA7046 (KV-S3411D/S3413E)

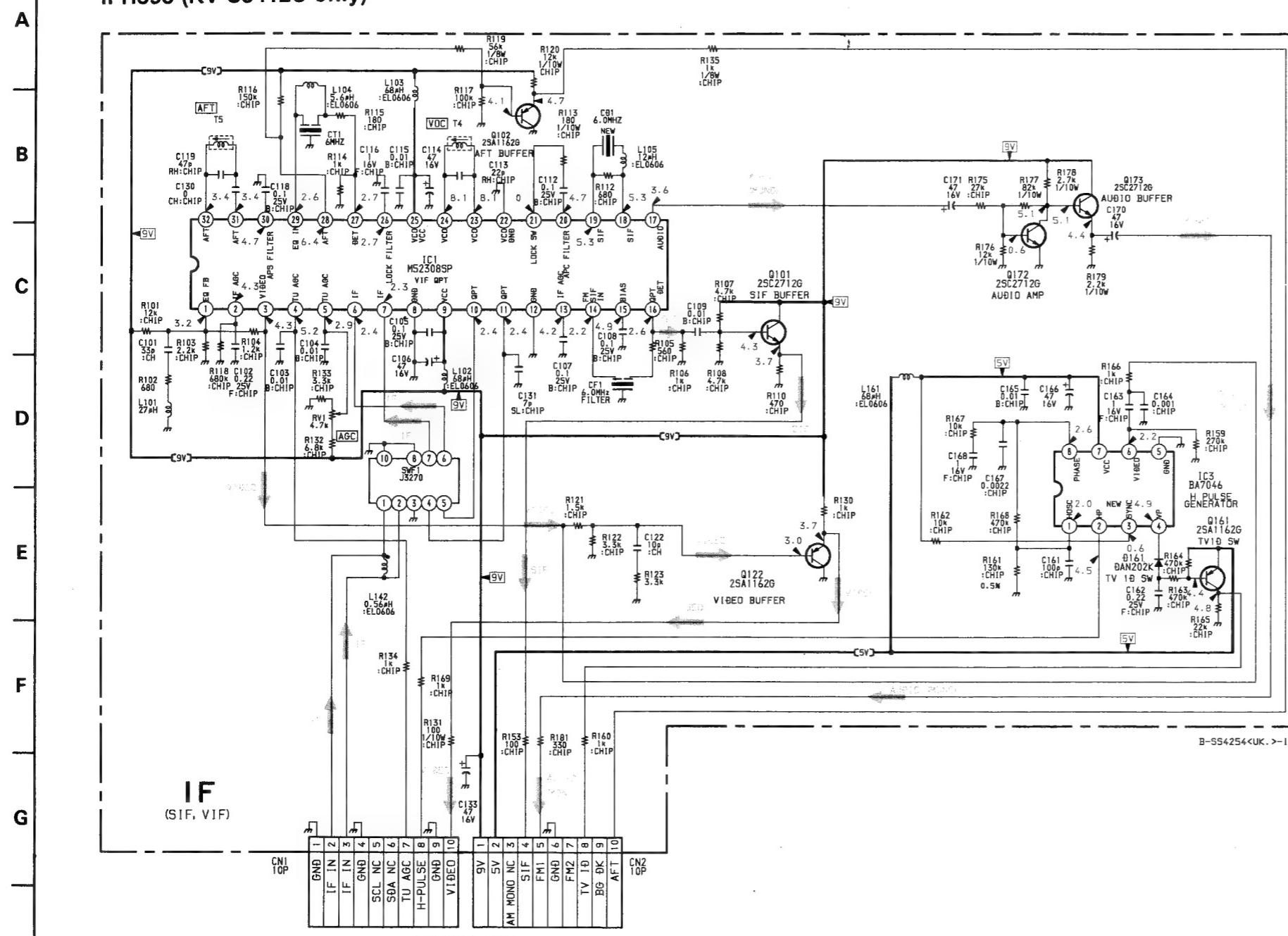


• IF BOARD IC3 PCF8574 (KV-S3411B)

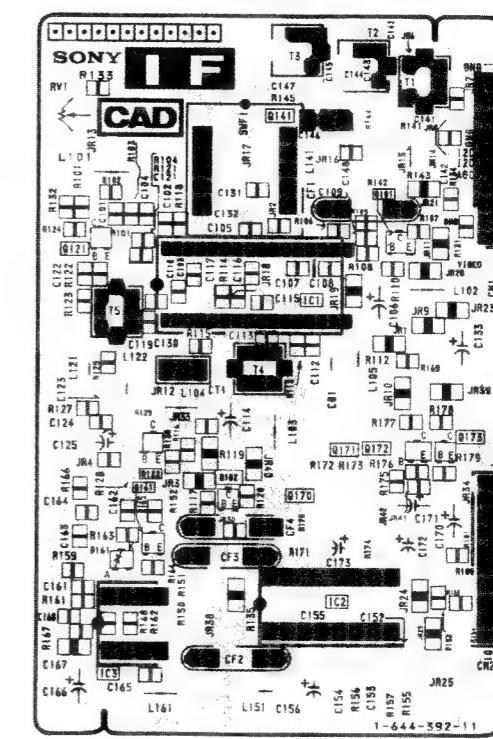




IFH395 (KV-S3412U only)

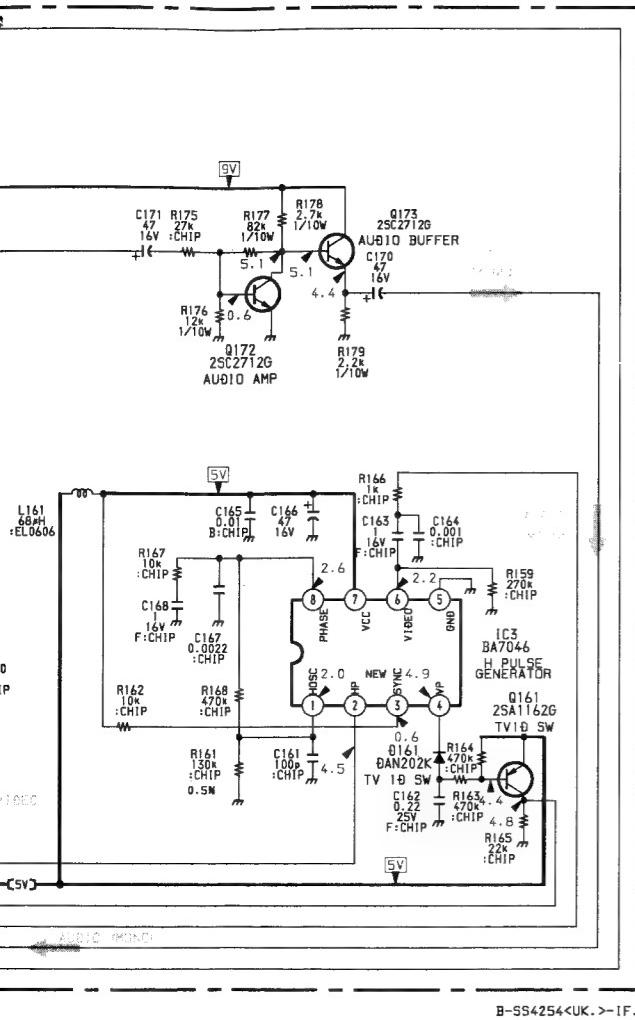
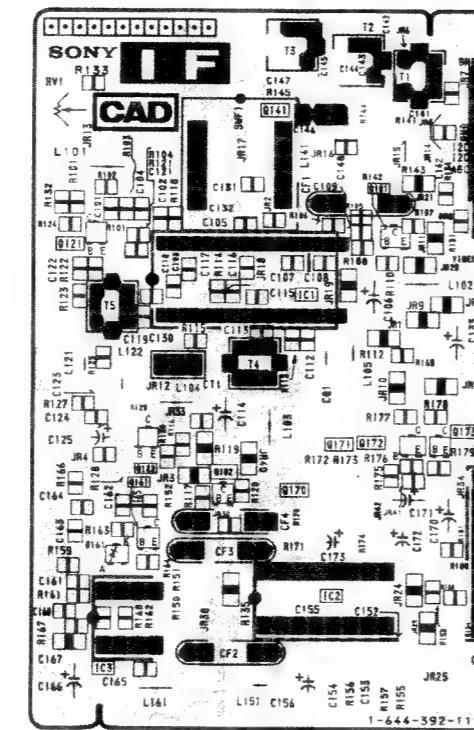


– IF BOARD – (KV-S3412U only)

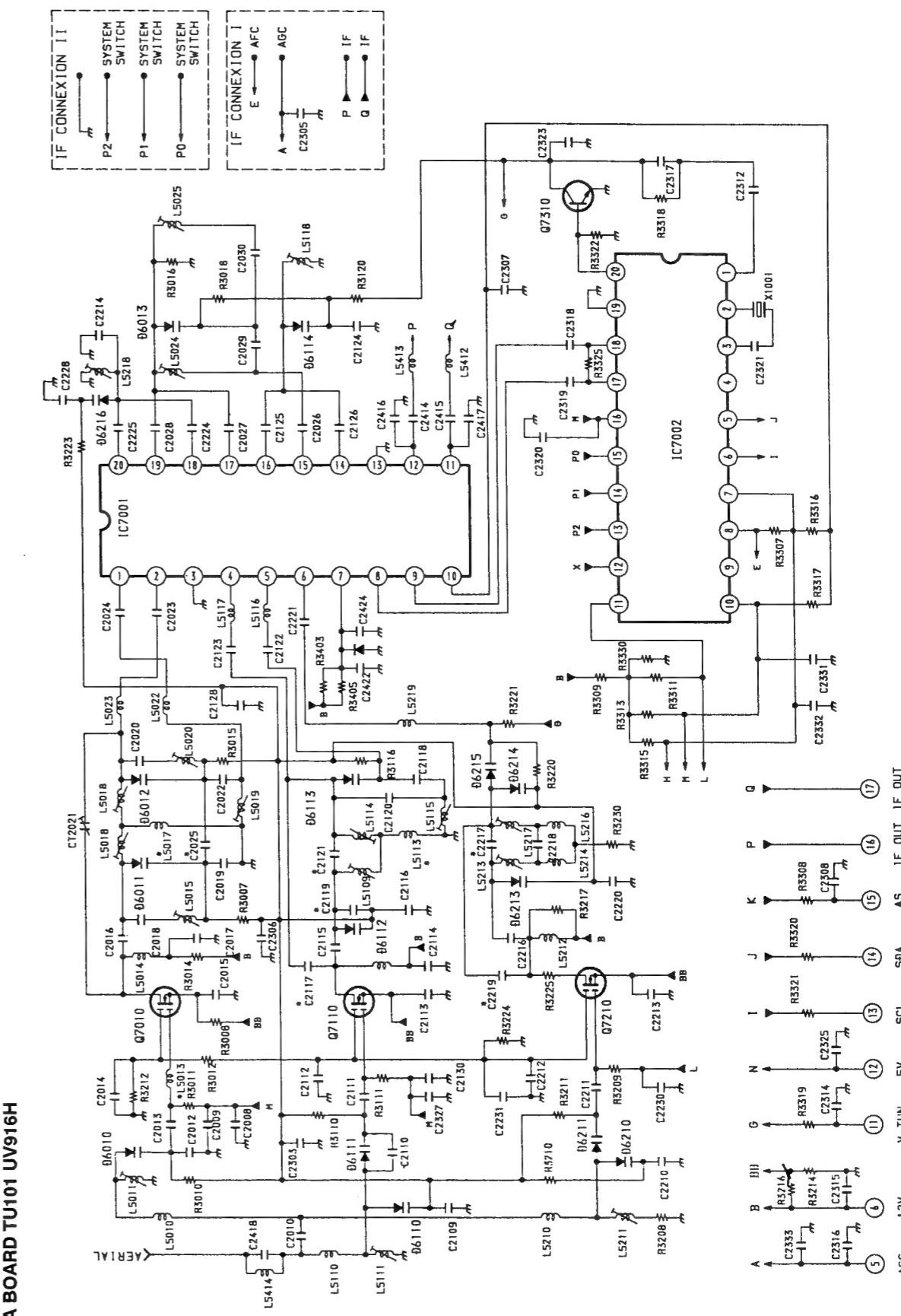


7 | 8 | 9 | 10

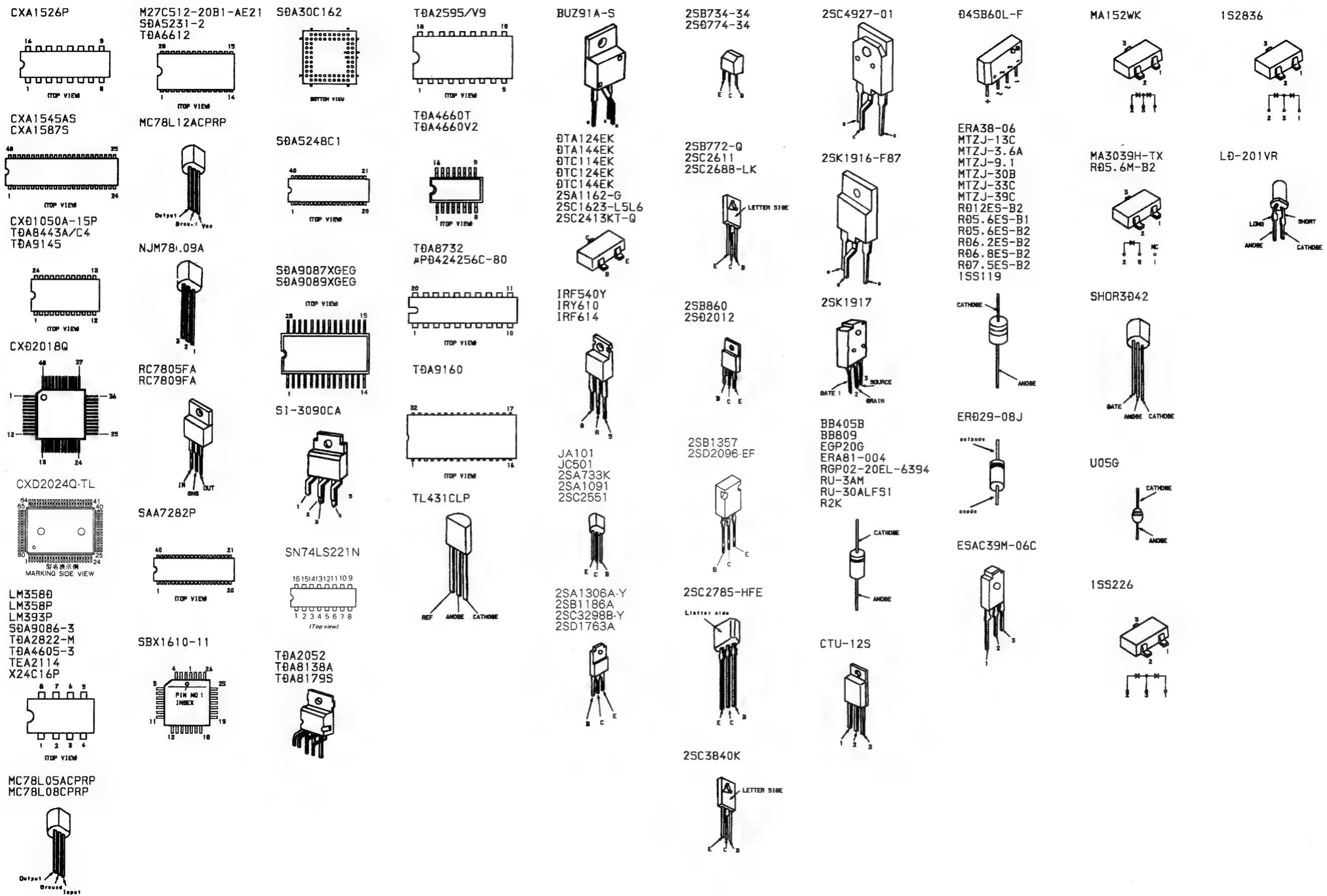
- IF BOARD - (KV-S3412U o



5-5. SCHEMATIC DIAGRAM OF TUNER



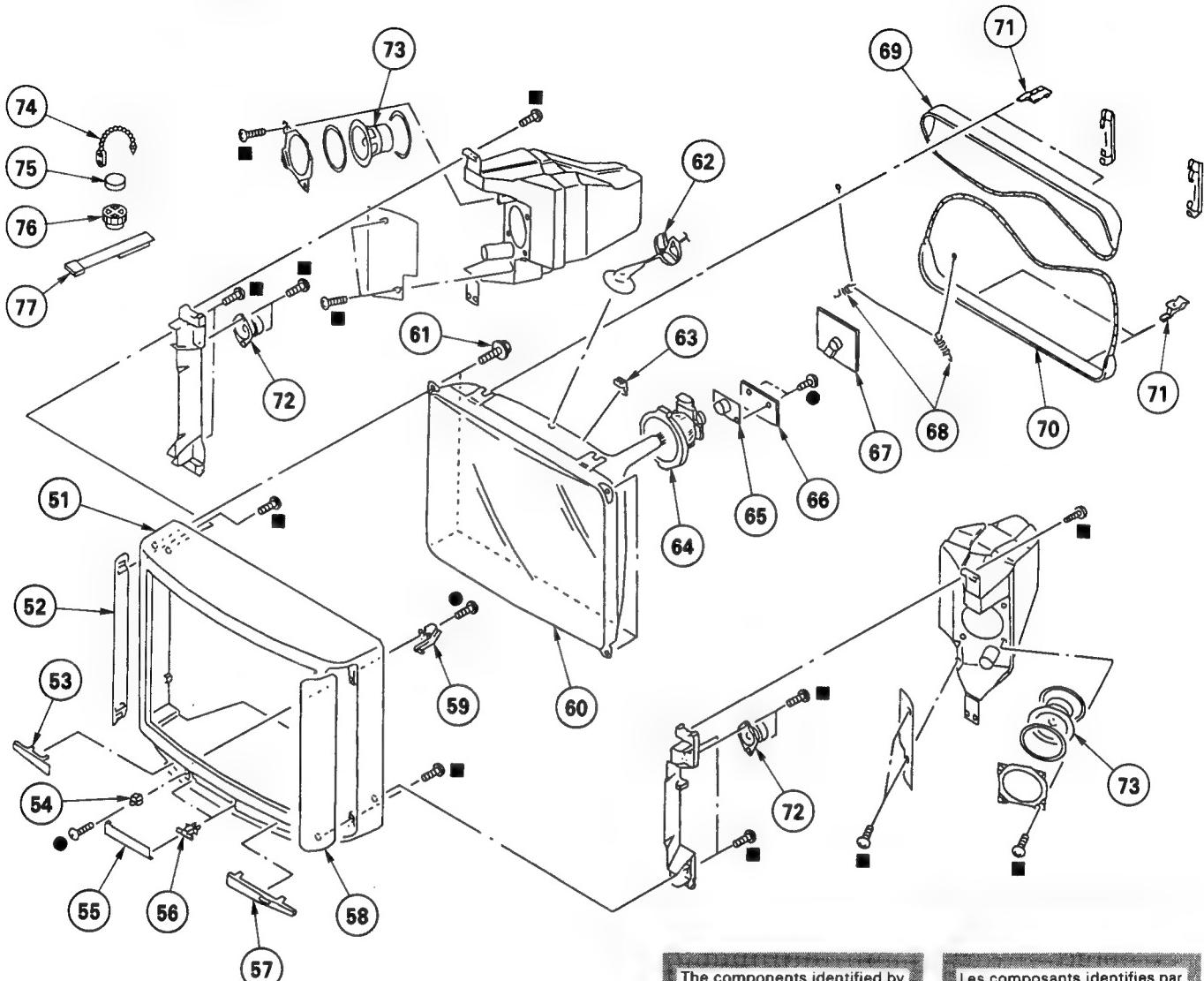
5-6. SEMICONDUCTORS



REF. NO. PAR
 1 *1-6
 2 *1-6
 3 4-2
 4 *A-1
 5 *A-1
 6 *A-1
 7 *A-1
 8 *A-1
 9 *4-2
 10 *A-1
 11 *4-2
 12 *A-1
 13 *A-1
 14 *A-1
 15 *A-1
 *A-1
 *A-1

6-2. PICTURE TUBE

- : BVTP3 × 12 7-685-648-71
- : BVTP4 × 16 7-685-663-79



The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4030-985-1	CABINET ASSY (WITH BEZEL ASSY)		64	Δ 1-451-393-11	DEFLECTION YOKE (Y34EXA)	
52	X-4030-983-1	GRILLE (LEFT) ASSY, SPEAKER		65	Δ 1-452-616-13	NBCK ASSY, PICTURE TUBE (NA323)	
53	4-202-127-01	PLATE, ORNAMENTAL	(KV-S3411A, S3411B, S3411D)	66	*A-1342-189-A	VM BOARD, COMPLETE	
	4-202-127-11	PLATE, ORNAMENTAL	(KV-S3412U, S3413E)	67	*A-1638-033-A	C BOARD, COMPLETE	
54	4-036-881-01	LOCK ASSY, DOOR		68	4-369-318-00	SPRING, TENSION	
55	4-202-125-01	DOOR		69	Δ 1-406-701-11	COIL, DEMAGNETIZATION	
56	3-703-035-11	SHAFT, LID		70	Δ 1-406-702-11	COIL, DEMAGNETIZATION	
57	4-202-123-01	WINDOW, ORNAMENTAL		71	4-033-744-01	CLIP	
58	X-4030-984-1	GRILLE (RIGHT) ASSY, SPEAKER		72	1-504-121-21	SPEAKER (SQUAWKER) (5CM)	
59	X-4030-459-1	DAMPER ASSY		73	1-504-145-11	SPEAKER (12CM)	
60	Δ 8-733-731-05	PICTURE TUBE (M81KVA10X)		74	4-308-870-00	CLIP, LEAD WIRE	
61	4-036-188-01	SCREW (M), PT		75	1-452-032-00	MAGNET, DISK; 10MM ϕ	
62	*3-704-372-01	HOLDER, HV CABLE		76	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM ϕ	
63	3-704-495-01	SPACER, DY		77	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	

SECTION 7 ELECTRICAL PARTS LIST

F1 A1

NOTE:

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

Les composants identifies par une trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

RESISTORS

- All resistors are in ohms
 - F : nonflammable

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	*A-1241-086-A	F1 BOARD, COMPLETE *****		C1120	1-163-193-00	CERAMIC CHIP 330PF	5% 50V
1-533-230-11		HOLDER, FUSE		C1121	1-163-113-00	CERAMIC CHIP 68PF	5% 50V
		<CONNECTOR>		C1122	1-163-081-00	CERAMIC CHIP 0.22MF	25V
				C1123	1-106-228-00	MYLAR 0.22MF	10% 100V
				C1124	1-124-477-11	ELECT 47MF	20% 16V
				C1125	1-124-477-11	ELECT 47MF	20% 16V
CN0003Δ	*1-580-844-11	PIN, CONNECTOR (POWER)		C1126	1-163-077-00	CERAMIC CHIP 0.1MF	10% 25V
CN0831Δ	*1-695-292-11	PIN, CONNECTOR (POWER)		C1127	1-163-038-00	CERAMIC CHIP 0.1MF	25V
		<FUSE>		C1128	1-124-477-11	ELECT 47MF	20% 16V
F651 Δ	1-576-232-21	FUSE (H.B.C.) 5A/250V		C1129	1-163-038-00	CERAMIC CHIP 0.1MF	25V
		<SWITCH>		C1130	1-163-205-00	CERAMIC CHIP 0.001MF	10% 50V
S651 Δ	1-571-433-12	SWITCH, PUSH (AC POWER)		C1131	1-163-059-00	CERAMIC CHIP 0.01MF	50V
		*****		C1132	1-163-038-00	CERAMIC CHIP 0.1MF	25V
	*A-1292-247-A	A1 BOARD, COMPLETE (KV-S3412U) *****		C1133	1-124-907-11	ELECT 10MF	20% 50V
	*A-1292-248-A	A1 BOARD, COMPLETE (KV-S3413E) *****		C1134	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
		<FILTER>		C1135	1-163-038-00	CERAMIC CHIP 0.1MF	25V
BP1101	1-236-238-11	FILTER, BAND PASS (KV-S3412U)		C1136	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
	1-239-047-11	FILTER, BAND PASS (KV-S3413E)		C1137	1-163-038-00	CERAMIC CHIP 0.1MF	25V
CF1101	1-409-333-00	TRAP, CERAMIC (6.0MHZ) (KV-S3412U)		C1138	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
CF1102	1-404-134-00	TRAP, CERAMIC (5.5MHZ) (KV-S3413E)		C1139	1-163-105-00	CERAMIC CHIP 33PF	5% 50V
		<CAPACITOR>		C1140	1-163-181-00	CERAMIC CHIP 100PF	5% 50V
C1101	1-126-101-11	ELECT 100MF	20%	C1141	1-163-205-00	CERAMIC CHIP 0.001MF	5% 50V
C1102	1-126-101-11	ELECT 100MF	20%	C1142	1-163-019-00	CERAMIC CHIP 0.0068MF	50V
C1103	1-163-038-00	CERAMIC CHIP 0.1MF		C1143	1-163-003-11	CERAMIC CHIP 330PF	10% 50V
C1104	1-163-077-00	CERAMIC CHIP 0.1MF	10%	C1144	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C1105	1-164-489-11	CERAMIC CHIP 0.22MF	10%	C1145	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
C1106	1-163-187-00	CERAMIC CHIP 180PF	5%	C1146	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1107	1-163-009-11	CERAMIC CHIP 0.001MF	10%	C1147	1-124-477-11	ELECT 47MF	20% 16V
C1108	1-163-059-00	CERAMIC CHIP 0.01MF		C1148	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
C1109	1-163-033-00	CERAMIC CHIP 0.022MF		C1149	1-124-477-11	ELECT 47MF	20% 16V
C1110	1-164-336-11	CERAMIC CHIP 0.33MF		C1150	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1111	1-163-009-11	CERAMIC CHIP 0.001MF	10%	C1151	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1112	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	C1152	1-124-477-11	ELECT 47MF	20% 16V
C1113	1-124-477-11	ELECT 47MF	20%	C1153	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C1114	1-163-038-00	CERAMIC CHIP 0.1MF		C1154	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1115	1-124-477-11	ELECT 47MF	20%	C1155	1-124-477-11	ELECT 47MF	20% 16V
C1116	1-106-228-00	MYLAR 0.22MF	10%	C1156	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C1117	1-163-081-00	CERAMIC CHIP 0.22MF		C1157	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C1118	1-163-113-00	CERAMIC CHIP 68PF	5%	C1158	1-163-038-00	CERAMIC CHIP 0.1MF	25V
C1119	1-163-193-00	CERAMIC CHIP 330PF	5%	C1159	1-163-243-11	CERAMIC CHIP 47PF	5% 50V
		<CONNECTOR>					(KV-S3412U)
		<DIODE>		CN0201	1-695-300-11	CONNECTOR, BOARD TO BOARD 20P	
				D1101	8-719-104-34	DIODE 1S2836	
				D1102	8-719-027-70	DIODE 1SV217-TPH3	
				D1103	8-719-820-71	DIODE 1SV214	

A1 A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<FERRITE BEAD>											
FB1101	1-410-396-41	FERRITE BEAD INDUCTOR		R1124	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
FB1102	1-410-396-41	FERRITE BEAD INDUCTOR		R1125	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
FB1103	1-410-396-41	FERRITE BEAD INDUCTOR		R1126	1-216-218-00	METAL GLAZE	6.8K 5% 1/8W				
FB1104	1-410-396-41	FERRITE BEAD INDUCTOR		R1127	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
FB1105	1-410-396-41	FERRITE BEAD INDUCTOR		R1128	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
FB1107	1-410-396-41	FERRITE BEAD INDUCTOR		R1129	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
<IC>											
IC1101	8-759-511-88	IC TDA8732		R1130	1-216-246-00	METAL GLAZE	100K 5% 1/8W				
IC1102	8-759-073-17	IC SAA7282P		R1131	1-216-218-00	METAL GLAZE	6.8K 5% 1/8W				
<COIL>											
L1101	1-408-405-00	INDUCTOR	4.7UH	R1132	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
L1102	1-408-405-00	INDUCTOR	4.7UH	R1133	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
L1103	1-410-119-11	INDUCTOR	1MMH	R1134	1-216-212-00	METAL GLAZE	3.9K 5% 1/8W				
L1104	1-410-119-11	INDUCTOR	1MMH	R1135	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
L1105	1-408-411-00	INDUCTOR	15UH (KV-S3412U)	R1136	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
<TRANSISTOR>											
Q1101	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R1137	1-216-095-00	METAL GLAZE	82K 5% 1/10W				
Q1102	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R1138	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
Q1103	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R1139	1-216-005-00	METAL GLAZE	15 5% 1/10W				
Q1104	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R1140	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				
Q1105	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R1141	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				
Q1106	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R1142	1-216-033-00	METAL GLAZE	220 5% 1/10W				
Q1107	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R1143	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
Q1108	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R1144	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
<RESISTOR>											
JR1101	1-216-296-00	METAL GLAZE	0 5% 1/8W (KV-S3413E)	R1145	1-216-001-00	METAL GLAZE	10 5% 1/10W				
JR1102	1-216-296-00	METAL GLAZE	0 5% 1/8W	R1146	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
JR1103	1-216-296-00	METAL GLAZE	0 5% 1/8W	R1147	1-216-045-00	METAL GLAZE	680 5% 1/10W				
JR1104	1-216-295-00	METAL GLAZE	0 5% 1/10W	R1148	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1101	1-216-188-00	METAL GLAZE	390 5% 1/8W	R1149	1-216-001-00	METAL GLAZE	10 5% 1/10W				
R1102	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R1150	1-216-045-00	METAL GLAZE	680 5% 1/10W				
R1103	1-216-198-00	METAL GLAZE	1K 5% 1/8W	R1151	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1104	1-216-041-00	METAL GLAZE	470 5% 1/10W	R1152	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1105	1-216-005-00	METAL GLAZE	15 5% 1/10W	R1153	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1106	1-216-036-00	METAL GLAZE	300 5% 1/10W	R1154	1-216-041-00	METAL GLAZE	470 5% 1/10W				
R1107	1-216-042-00	METAL GLAZE	510 5% 1/10W	<CRYSTAL>							
R1108	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	X1101	1-579-689-21	VIBRATOR, CRYSTAL					
R1109	1-216-202-00	METAL GLAZE	1.5K 5% 1/8W	X1102	1-579-283-11	VIBRATOR, CRYSTAL (KV-S3412U)					
R1110	1-216-196-00	METAL GLAZE	820 5% 1/8W	X1102	1-579-282-21	VIBRATOR, CRYSTAL (KV-S3413E)					
R1111	1-216-041-00	METAL GLAZE	470 5% 1/10W	*****							
R1112	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	*A-1297-008-A	A BOARD, COMPLETE						
R1113	1-216-001-00	METAL GLAZE	10 5% 1/10W	*****							
R1114	1-216-105-00	METAL GLAZE	220K 5% 1/10W	(KV-S3411A,S3411D,S3413E)							
R1115	1-216-121-00	METAL GLAZE	1M 5% 1/10W	*A-1297-007-A	A BOARD, COMPLETE (KV-S3411B)						
R1116	1-216-049-00	METAL GLAZE	1K 5% 1/10W	*****							
R1117	1-216-097-00	METAL GLAZE	100K 5% 1/10W	*A-1297-012-A	A BOARD, COMPLETE (KV-S3412U)						
R1118	1-216-097-00	METAL GLAZE	100K 5% 1/10W	*****							
R1119	1-216-073-00	METAL GLAZE	10K 5% 1/10W	*****							
R1120	1-216-232-00	METAL GLAZE	27K 5% 1/8W	4-200-001-01 HOLDER, IC							
R1121	1-216-081-00	METAL GLAZE	22K 5% 1/10W	4-201-023-01 SPACER, INSULATING							
R1122	1-216-158-00	METAL GLAZE	22 5% 1/8W	4-812-134-00 RIVET NYLON, 3.5							
R1123	1-216-158-00	METAL GLAZE	22 5% 1/8W	<CAPACITOR>							
C071								C071	1-124-126-00	ELECT	47MF 20% 10V
C072								C072	1-124-120-11	ELECT	220MF 20% 16V
C074								C074	1-163-001-11	CERAMIC CHIP	220PF 10% 50V
C102								C102	1-126-103-11	ELECT	470MF 20% 16V
C103								C103	1-163-031-11	CERAMIC CHIP	0.01MF 50V
C104								C104	1-124-910-11	ELECT	47MF 20% 50V
C105								C105	1-124-916-11	ELECT	22MF 20% 50V
C106								C106	1-124-927-11	ELECT	4.7MF 20% 50V
(KV-S3411A,S3411D,S3412U,S3413E)								(KV-S3411B)			
C106								C106	1-124-907-11	ELECT	100MF 20% 50V
(KV-S3411B)								(KV-S3411B)			
C110								C110	1-124-478-11	ELECT	100MF 20% 25V

A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C120	1-163-031-11	CERAMIC CHIP 0.01MF		50V	C318	CERAMIC CHIP 27PF	5%
C201	1-130-489-00	FILM 0.033MF	5%	50V	C319	CERAMIC CHIP 0.1MF	25V
C202	1-130-489-00	FILM 0.033MF	5%	50V	C320	ELECT 47MF	20% 50V
C203	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C321	CERAMIC CHIP 0.1MF	25V
C204	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C322	ELECT 22MF	20% 50V
C205	1-124-907-11	ELECT 10MF	20%	50V	C323	CERAMIC CHIP 56PF	5% 50V
C206	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V	C324	ELECT 47MF	20% 50V
C207	1-137-613-11	FILM 0.0018MF	2%	100V	C325	CERAMIC CHIP 56PF	5% 50V
C208	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C341	CERAMIC CHIP 0.1MF	10% 25V
C209	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C342	CERAMIC CHIP 0.1MF	10% 25V
C210	1-164-005-11	CERAMIC CHIP 0.47MF		25V	C343	CERAMIC CHIP 0.1MF	10% 25V
C213	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V	C344	CERAMIC CHIP 1MF	16V
C214	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V	C345	CERAMIC CHIP 1MF	16V
C215	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	C347	CERAMIC CHIP 1MF	16V
C216	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	C348	CERAMIC CHIP 1MF	16V
C217	1-124-925-11	ELECT 2.2MF	20%	50V	C349	CERAMIC CHIP 1MF	16V
C218	1-124-925-11	ELECT 2.2MF	20%	50V	C350	ELECT 10MF	20% 50V
C219	1-163-011-11	CERAMIC CHIP 0.0015MF	10%	50V	C351	ELECT 22MF	20% 50V
C220	1-163-011-11	CERAMIC CHIP 0.0015MF	10%	50V	C353	CERAMIC CHIP 1MF	16V
C221	1-124-925-11	ELECT 2.2MF	20%	50V	C354	CERAMIC CHIP 1MF	16V
C222	1-124-925-11	ELECT 2.2MF	20%	50V	C355	CERAMIC CHIP 1MF	16V
C223	1-136-177-00	FILM 1MF	5%	50V	C356	CERAMIC CHIP 0.22MF	10% 16V
C224	1-136-177-00	FILM 1MF	5%	50V	C357	CERAMIC CHIP 0.22MF	10% 25V
C225	1-164-182-11	CERAMIC CHIP 0.0033MF	10%	50V	C358	CERAMIC CHIP 0.22MF	10% 25V
C226	1-163-007-11	CERAMIC CHIP 680PF	10%	50V	C359	ELECT 10MF	20% 50V
C227	1-124-907-11	ELECT 10MF	20%	50V	C361	CERAMIC CHIP 22PF	5% 50V
C228	1-124-907-11	ELECT 10MF	20%	50V	C362	FILM 0.22MF	5% 63V
C229	1-124-478-11	ELECT 100MF	20%	25V	C363	ELECT 10MF	20% 50V
C230	1-124-478-11	ELECT 100MF	20%	25V	C365	ELECT 220MF	20% 16V
C231	1-164-346-11	CERAMIC CHIP 1MF		16V	C366	ELECT 1MF	20% 50V
C232	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	C401	CERAMIC CHIP 0.47MF	16V
C233	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V	C402	ELECT 33MF	20% 50V
C234	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V	C403	CERAMIC CHIP 0.47MF	16V
C235	1-130-772-00	FILM 0.22MF	5%	63V	C411	CERAMIC CHIP 0.47MF	25V
C236	1-124-618-11	ELECT 2200MF	20%	35V	C412	CERAMIC CHIP 0.47MF	25V
C237	1-124-618-11	ELECT 2200MF	20%	35V	C421	ELECT 47MF	20% 50V
C238	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V	C422	ELECT 47MF	20% 50V
C239	1-130-772-00	FILM 0.22MF	5%	63V	C423	CERAMIC 0.01MF	50V
C240	1-124-916-11	ELECT 22MF	20%	50V	C424	CERAMIC CHIP 330PF	5% 50V
C241	1-124-916-11	ELECT 22MF	20%	50V	C425	CERAMIC CHIP 330PF	5% 50V
C242	1-124-903-11	ELECT 1MF	20%	50V	C426	ELECT 47MF	20% 50V
C244	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	C427	CERAMIC CHIP 1MF	16V
C248	1-163-185-00	CERAMIC CHIP 150PF	5%	50V	C428	CERAMIC CHIP 1MF	16V
C249	1-163-129-00	CERAMIC CHIP 330PF	5%	50V	C429	ELECT 330MF	20% 16V
C251	1-126-320-11	ELECT 10MF	20%	16V	C574	CERAMIC CHIP 100PF	5% 50V
C301	1-163-038-00	CERAMIC CHIP 0.1MF		25V	C581	CERAMIC CHIP 0.01MF	50V
C302	1-163-038-00	CERAMIC CHIP 0.1MF		25V	C582	ELECT 22MF	20% 50V
C303	1-164-337-11	CERAMIC CHIP 2.2MF		16V	C583	CERAMIC CHIP 330PF	5% 50V
C303A	1-124-903-11	ELECT 1MF	20%	50V	C586	CERAMIC CHIP 0.022MF	10% 50V
(KV-S3411B)							
C304	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C587	ELECT 1MF	20% 50V
C305	1-163-097-00	CERAMIC CHIP 15PF	5%	50V	C588	CERAMIC CHIP 1MF	16V
C306	1-163-097-00	CERAMIC CHIP 15PF	5%	50V	C589	ELECT 470MF	20% 16V
C307	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	C590	ELECT 22MF	20% 50V
C308	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	C591	ELECT 2.2MF	20% 50V
C309	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	C592	CERAMIC CHIP 0.0047MF	10% 50V
C310	1-163-038-00	CERAMIC CHIP 0.1MF		25V	C593	CERAMIC CHIP 0.0033MF	10% 50V
C311	1-163-038-00	CERAMIC CHIP 0.1MF		25V	C595	CERAMIC CHIP 47PF	5% 50V
C312	1-124-910-11	ELECT 47MF	20%	50V	C599	CERAMIC CHIP 0.01MF	10% 50V
C313	1-163-077-00	CERAMIC CHIP 0.1MF		50V	C681	ELECT 100MF	20% 25V
C314	1-163-038-00	CERAMIC CHIP 0.1MF		25V	C682	ELECT 100MF	20% 16V
C315	1-124-910-11	ELECT 47MF	20%	50V	C683	ELECT 100MF	20% 25V
C316	1-163-077-00	CERAMIC CHIP 0.1MF		50V	C684	ELECT 100MF	20% 25V
C317	1-163-103-00	CERAMIC CHIP 27PF	5%	50V	C685	ELECT 100MF	20% 25V

A

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<FILTER>											
CF581	1-577-611-11	OSCILALTOR, CERAMIC		IC072	8-759-073-14	IC X24C16P					
<CONNECTOR>											
CN0001*1-568-880-51	PIN, CONNECTOR 5P			IC201	8-759-073-30	IC TDA6612					
CN0101 1-695-297-11	CONNECTOR, BOARD TO BOARD 20P (KV-S3411A, S3411D, S3412U, S3413E)				8-759-073-31	IC TDA6622 (KV-S3412U)					
CN0102 1-573-296-11	CONNECTOR, BOARD TO BOARD 10P			IC202	8-759-502-21	IC TDA2822M					
CN0103*1-564-511-31	PLUG, CONNECTOR 8P			IC251	8-759-072-99	IC TDA2052					
CN0104*1-568-882-51	PIN, CONNECTOR 7P			IC261	8-759-072-99	IC TDA2052					
CN0105*1-568-880-51	PIN, CONNECTOR 5P			IC301	8-759-073-15	IC TDA9145/N1					
CN0107*1-568-879-51	PIN, CONNECTOR 4P			IC302	8-759-084-91	IC TDA4661/V2					
CN0108*1-568-878-51	PIN, CONNECTOR 3P			IC304	8-752-056-54	IC CXA1587S					
CN0109 1-695-299-11	CONNECTOR, BOARD TO BOARD 50P			IC401	8-752-062-86	IC CXA1545AS					
CN0110*1-568-882-51	PIN, CONNECTOR 7P			IC402	8-759-073-00	IC TEA2114					
CN0111 1-568-882-51	PIN, CONNECTOR 7P			IC681	8-759-072-98	IC TDA8138A					
CN0113 1-695-298-11	CONNECTOR, BOARD TO BOARD 40P			IC683	8-759-982-10	IC RC7809FA					
CN0114*1-568-879-51	PIN, CONNECTOR 4P			IC684	8-759-982-10	IC RC7809FA					
CN0115*1-564-516-11	PLUG, CONNECTOR 13P			<IF BLOCK>							
CN0116*1-568-879-11	PIN, CONNECTOR 4P			IFB101	1-466-733-11	IF BLOCK (IFH-389) (KV-S3411A, S3411D, S3413E)					
CN0119*1-568-879-11	PIN, CONNECTOR 4P				1-466-735-11	IF BLOCK (IFH-389F) (KV-S3411B)					
CN0137*1-564-511-11	PLUG, CONNECTOR 8P				1-466-734-11	IF BLOCK (IFH-395) (KV-S3412U)					
CN5108*1-564-513-41	PLUG, CONNECTOR 10P			<COIL>							
<DIODE>											
D068	8-719-104-34	DIODE 1S2836		L101	1-412-546-41	INDUCTOR	560UH				
D069	8-719-104-34	DIODE 1S2836		L102	1-408-413-00	INDUCTOR	22UH				
D071	8-719-109-89	DIODE RD5.6ES-B2		L201	1-407-500-00	INDUCTOR	4.7MMH				
D073	8-719-109-89	DIODE RD5.6ES-B2		L306	1-408-405-00	INDUCTOR	4.7UH				
D075	8-719-400-18	DIODE MA152WK		L307	1-408-405-00	INDUCTOR	4.7UH				
D077	8-719-400-18	DIODE MA152WK		L308	1-408-417-00	INDUCTOR	47UH				
D078	8-719-109-89	DIODE RD5.6ES-B2		L309	1-408-411-00	INDUCTOR	15UH				
D079	8-719-109-89	DIODE RD5.6ES-B2		L310	1-410-396-41	INDUCTOR	0.45UH				
D101	8-719-982-27	DIODE MTZJ-33C		L572	1-410-119-11	INDUCTOR	1MMH				
D206	8-719-400-18	DIODE MA152WK		L610	1-412-539-41	INDUCTOR	150UH				
D207	8-719-921-89	DIODE MTZJ-13C		L611	1-412-539-41	INDUCTOR	150UH				
D208	8-719-911-19	DIODE ISS119		<IC LINK>							
D209	8-719-911-19	DIODE ISS119		PS681A	1-532-605-91	LINK, IC 0.4A					
D210	8-719-911-19	DIODE ISS119		<TRANSISTOR>							
D211	8-719-911-19	DIODE ISS119		Q071	8-729-901-05	TRANSISTOR DTA124EK					
D212	8-719-911-19	DIODE ISS119		Q101	8-729-216-22	TRANSISTOR 2SA1162-G					
D213	8-719-400-18	DIODE MA152WK		Q102	8-729-901-00	TRANSISTOR DTC124EK					
D301	8-719-400-18	DIODE MA152WK		Q103	8-729-900-53	TRANSISTOR DTC114EK					
D302	8-719-104-34	DIODE 1S2836		Q201	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R					
D304	8-719-109-89	DIODE RD5.6ES-B2		Q202	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R					
D305	8-719-400-18	DIODE MA152WK		Q203	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R					
D306	8-719-400-18	DIODE MA152WK		Q204	8-729-216-22	TRANSISTOR 2SA1162-G					
D307	8-719-400-18	DIODE MA152WK		Q205	8-729-216-22	TRANSISTOR 2SA1162-G					
D308	8-719-800-76	DIODE ISS226		Q206	8-729-216-22	TRANSISTOR 2SA1162-G					
D311	8-719-800-76	DIODE ISS226		Q207	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R					
D381	8-719-110-03	DIODE RD7.5ES-B2		Q209	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R					
D401	8-719-921-69	DIODE MTZJ-9.1		Q210	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R					
D403	8-719-921-69	DIODE MTZJ-9.1		Q301	8-729-901-00	TRANSISTOR DTC124EK					
D405	8-719-921-69	DIODE MTZJ-9.1		Q302	8-729-216-22	TRANSISTOR 2SA1162-G					
D406	8-719-921-69	DIODE MTZJ-9.1		Q303	8-729-216-22	TRANSISTOR 2SA1162-G					
D407	8-719-921-69	DIODE MTZJ-9.1		Q304	8-729-900-53	TRANSISTOR DTC114EK					
D571	8-719-800-76	DIODE ISS226		Q305	8-729-901-01	TRANSISTOR DTC144EK					
D682	8-719-109-89	DIODE RD5.6ES-B2		Q306	8-729-216-22	TRANSISTOR 2SA1162-G					
				Q308	8-729-216-22	TRANSISTOR 2SA1162-G					

A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q309	8-729-931-02	TRANSISTOR 2SC2413KQ		JR213	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q311	8-729-901-06	TRANSISTOR DTA144EK-T146		JR214	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q312	8-729-900-53	TRANSISTOR DTC114EK		JR215	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q313	8-729-216-22	TRANSISTOR 2SA1162-G		JR216	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q401	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		JR217	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q402	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		JR218	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q403	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		JR219	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q404	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		JR220	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q581	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		JR221	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q582	8-729-216-22	TRANSISTOR 2SA1162-G		JR222	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q610	8-729-177-22	TRANSISTOR 2SB772-Q		JR223	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q611	8-729-900-53	TRANSISTOR DTC114EK		JR225	1-216-296-00	METAL GLAZE 0	5% 1/8W
Q683	8-729-140-96	TRANSISTOR 2SD774-34		JR226	1-216-296-00	METAL GLAZE 0	5% 1/8W
<RESISTOR>							
JR101	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR227	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR102	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR228	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR104	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR229	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR105	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR230	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR107	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR231	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR110	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR232	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR111	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR233	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR112	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR234	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR113	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR235	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR114	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR236	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR115	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR237	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR116	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR238	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR117	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR239	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR118	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR240	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR119	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR241	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR120	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR242	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR121	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR243	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR122	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR245	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR123	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR247	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR125	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR248	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR127	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR250	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR129	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR251	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR131	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR252	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR132	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR253	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR133	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR254	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR134	1-216-296-00	METAL GLAZE 0	5% 1/8W	JR255	1-216-295-00	METAL GLAZE 0	5% 1/10W
JR136	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR256	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR137	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR257	1-216-295-00	METAL GLAZE 0	5% 1/10W
JR138	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR258	1-216-296-00	METAL GLAZE 0	5% 1/8W
JR140	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR270	1-216-295-00	METAL GLAZE 0	5% 1/10W
JR141	1-216-295-00	METAL GLAZE 0	5% 1/10W	JR272	1-216-295-00	METAL GLAZE 0	5% 1/10W
JR142	1-216-295-00	METAL GLAZE 0	5% 1/10W	R071	1-216-041-00	METAL GLAZE 470	5% 1/10W
JR143	1-216-295-00	METAL GLAZE 0	5% 1/10W	R072	1-216-033-00	METAL GLAZE 220	5% 1/10W
JR144	1-216-295-00	METAL GLAZE 0	5% 1/10W	R073	1-216-033-00	METAL GLAZE 220	5% 1/10W
JR150	1-216-295-00	METAL GLAZE 0	5% 1/10W	R074	1-216-198-00	METAL GLAZE 1K	5% 1/8W
JR152	1-216-295-00	METAL GLAZE 0	5% 1/10W	R076	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
JR201A	1-216-296-00	METAL GLAZE 0	5% 1/8W	R077	1-216-025-00	METAL GLAZE 100	5% 1/10W
JR202	1-216-296-00	METAL GLAZE 0	5% 1/8W	R101	1-216-025-00	METAL GLAZE 100	5% 1/10W
JR203	1-216-296-00	METAL GLAZE 0	5% 1/8W	R102	1-216-049-00	METAL GLAZE 1K	5% 1/10W
JR204	1-216-296-00	METAL GLAZE 0	5% 1/8W	R103	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W
JR205	1-216-296-00	METAL GLAZE 0	5% 1/8W	R105	1-216-073-00	METAL GLAZE 10K	5% 1/10W
JR206	1-216-296-00	METAL GLAZE 0	5% 1/8W	R108	1-216-230-00	METAL GLAZE 22K	5% 1/8W
JR207	1-216-296-00	METAL GLAZE 0	5% 1/8W	R115	1-216-210-00	METAL GLAZE 3.3K	5% 1/8W
JR208	1-216-296-00	METAL GLAZE 0	5% 1/8W	R201	1-216-653-11	METAL CHIP 1.2K	0.50% 1/10W
JR209	1-216-296-00	METAL GLAZE 0	5% 1/8W	R202	1-216-653-11	METAL CHIP 1.2K	0.50% 1/10W
JR210	1-216-296-00	METAL GLAZE 0	5% 1/8W	R203	1-216-067-00	METAL GLAZE 5.6K	5% 1/10W
JR211	1-216-296-00	METAL GLAZE 0	5% 1/8W	R204	1-216-091-00	METAL GLAZE 56K	5% 1/10W
JR212	1-216-296-00	METAL GLAZE 0	5% 1/8W	R205	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W
				R206	1-216-071-00	METAL GLAZE 8.2K	5% 1/10W
				R207	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W

A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R208	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R316	1-216-085-00	METAL GLAZE	33K 5% 1/10W
R209	1-249-377-11	CARBON	0.47 5% 1/4W F	R317	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R210	1-247-734-11	CARBON	39 5% 1/2W	R318	1-216-041-00	METAL GLAZE	470 5% 1/10W
R211	1-247-734-11	CARBON	39 5% 1/2W	R319	1-249-413-11	CARBON	470 5% 1/4W
R212	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R320	1-216-174-00	METAL GLAZE	100 5% 1/8W
R213	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R321	1-216-039-00	METAL GLAZE	390 5% 1/10W
R214	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R322	1-216-041-00	METAL GLAZE	470 5% 1/10W
R215	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R324	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R216	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R325	1-216-041-00	METAL GLAZE	470 5% 1/10W
R217	1-216-045-00	METAL GLAZE	680 5% 1/10W	R326	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R218	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R328	1-216-025-00	METAL GLAZE	100 5% 1/10W
R221	1-212-849-00	FUSIBLE	4.7 5% 1/4W F	R329	1-216-023-00	METAL GLAZE	82 5% 1/10W
R222	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R330	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R223	1-216-045-00	METAL GLAZE	680 5% 1/10W	R331	1-216-097-00	METAL GLAZE	100K 5% 1/10W
R224	1-249-433-11	CARBON	22K 5% 1/4W	R333	1-216-182-00	METAL GLAZE	220 5% 1/8W
R225	1-212-849-00	FUSIBLE	4.7 5% 1/4W F	R334	1-216-182-00	METAL GLAZE	220 5% 1/8W
R226	1-249-412-11	CARBON	390 5% 1/4W	R336	1-216-178-00	METAL GLAZE	150 5% 1/8W
R227	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R337	1-216-041-00	METAL GLAZE	470 5% 1/10W
R228	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R338	1-216-035-00	METAL GLAZE	270 5% 1/10W
R229	1-216-039-00	METAL GLAZE	390 5% 1/10W	R339	1-216-025-00	METAL GLAZE	100 5% 1/10W
R230	1-216-246-00	METAL GLAZE	100K 5% 1/8W	R340	1-216-025-00	METAL GLAZE	100 5% 1/10W
R231	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R341	1-216-025-00	METAL GLAZE	100 5% 1/10W
R232	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R342	1-216-033-00	METAL GLAZE	220 5% 1/10W
R233	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W	R343	1-216-022-00	METAL GLAZE	75 5% 1/10W
R234	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R344	1-216-022-00	METAL GLAZE	75 5% 1/10W
R235	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R345	1-216-171-00	METAL GLAZE	75 5% 1/8W
R236	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R346	1-216-022-00	METAL GLAZE	75 5% 1/10W
R237	1-216-025-00	METAL GLAZE	100 5% 1/10W	R347	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R238	1-216-025-00	METAL GLAZE	100 5% 1/10W	R348	1-216-029-00	METAL GLAZE	150 5% 1/10W
R239	1-216-295-00	METAL GLAZE	0 5% 1/10W	R349	1-216-029-00	METAL GLAZE	150 5% 1/10W
R241	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R350	1-216-178-00	METAL GLAZE	150 5% 1/8W
R242	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W	R351	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R244	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W	R352	1-216-033-00	METAL GLAZE	220 5% 1/10W
R245	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R354	1-216-033-00	METAL GLAZE	220 5% 1/10W
R246	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R355	1-216-033-00	METAL GLAZE	220 5% 1/10W
R247	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R356	1-216-033-00	METAL GLAZE	220 5% 1/10W
R248	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R357	1-216-041-00	METAL GLAZE	470 5% 1/10W
R249	1-216-045-00	METAL GLAZE	680 5% 1/10W	R358	1-216-031-00	METAL GLAZE	180 5% 1/10W
R250	1-216-095-00	METAL GLAZE	82K 5% 1/10W	R359	1-216-033-00	METAL GLAZE	220 5% 1/10W
R251	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R360	1-216-033-00	METAL GLAZE	220 5% 1/10W
R252	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R361	1-216-033-00	METAL GLAZE	220 5% 1/10W
R253	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R362	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R254	1-216-252-00	METAL GLAZE	180K 5% 1/8W	R365	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R255	1-216-252-00	METAL GLAZE	180K 5% 1/8W	R366	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R256	1-249-409-11	CARBON	220 5% 1/4W	R367	1-216-212-00	METAL GLAZE	3.9K 5% 1/8W
R257	1-249-409-11	CARBON	220 5% 1/4W	R368	1-216-033-00	METAL GLAZE	220 5% 1/10W
R258	1-216-089-00	METAL GLAZE	47K 5% 1/10W	R369	1-216-033-00	METAL GLAZE	220 5% 1/10W
R259	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	R370	1-216-033-00	METAL GLAZE	220 5% 1/10W
R260	1-216-212-00	METAL GLAZE	3.9K 5% 1/8W	R371	1-216-033-00	METAL GLAZE	220 5% 1/10W
R301	1-216-041-00	METAL GLAZE	470 5% 1/10W	R373	1-216-017-00	METAL GLAZE	47 5% 1/10W
R302	1-216-041-00	METAL GLAZE	470 5% 1/10W	R376	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R303	1-216-174-00	METAL GLAZE	100 5% 1/8W	R377	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W
R304	1-216-174-00	METAL GLAZE	100 5% 1/8W	R378	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R305	1-216-035-00	METAL GLAZE	270 5% 1/10W	R379	1-216-206-00	METAL GLAZE	2.2K 5% 1/8W
R306	1-216-035-00	METAL GLAZE	270 5% 1/10W	R380	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R307	1-216-075-00	METAL GLAZE	12K 5% 1/10W	R381	1-216-164-00	METAL GLAZE	39 5% 1/8W
R308	1-216-121-00	METAL GLAZE	1M 5% 1/10W	R382	1-216-164-00	METAL GLAZE	39 5% 1/8W
R309	1-216-001-00	METAL GLAZE	10 5% 1/10W	R383	1-216-164-00	METAL GLAZE	39 5% 1/8W
R310	1-216-001-00	METAL GLAZE	10 5% 1/10W	R401	1-216-171-00	METAL GLAZE	75 5% 1/8W
R311	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R402	1-216-158-00	METAL GLAZE	22 5% 1/8W
R312	1-249-413-11	CARBON	470 5% 1/4W	R403	1-216-025-00	METAL GLAZE	100 5% 1/10W
R313	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R404	1-216-158-00	METAL GLAZE	22 5% 1/8W
R314	1-249-409-11	CARBON	220 5% 1/4W	R405	1-216-025-00	METAL GLAZE	100 5% 1/10W
R315	1-249-409-11	CARBON	220 5% 1/4W				

A

IF(KV-S3411A/S3411D)
S3413F

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R406	1-216-158-00	METAL GLAZE	22 5% 1/8W	C103	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R407	1-216-025-00	METAL GLAZE	100 5% 1/10W	C104	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R408	1-216-093-00	METAL GLAZE	68K 5% 1/10W	C105	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R410	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C106	1-124-477-11	ELECT 47MF	20% 16V
R411	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C107	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R412	1-216-022-00	METAL GLAZE	75 5% 1/10W	C108	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R413	1-216-022-00	METAL GLAZE	75 5% 1/10W	C109	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R414	1-216-022-00	METAL GLAZE	75 5% 1/10W	C112	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R416	1-216-113-00	METAL GLAZE	470K 5% 1/10W	C113	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
R417	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C114	1-124-477-11	ELECT 47MF	20% 16V
R419	1-216-113-00	METAL GLAZE	470K 5% 1/10W	C115	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R420	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C116	1-164-346-11	CERAMIC CHIP 1MF	16V
R423	1-216-015-00	METAL GLAZE	39 5% 1/10W	C118	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R424	1-216-025-00	METAL GLAZE	100 5% 1/10W	C119	1-163-369-11	CERAMIC CHIP 47PF	5% 50V
R425	1-216-025-00	METAL GLAZE	100 5% 1/10W	C121	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
R426	1-216-025-00	METAL GLAZE	100 5% 1/10W	C122	1-163-239-11	CERAMIC CHIP 33PF	5% 50V
R427	1-216-025-00	METAL GLAZE	100 5% 1/10W	C123	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
R428	1-249-393-11	CARBON	10 5% 1/4W F	C124	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R572	1-216-198-00	METAL GLAZE	1K 5% 1/8W	C130	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R574	1-216-041-00	METAL GLAZE	470 5% 1/10W	C131	1-163-093-00	CERAMIC CHIP 10PF	5% 50V
R575	1-216-037-00	METAL GLAZE	330 5% 1/10W	C133	1-124-477-11	ELECT 47MF	20% 16V
R581	1-216-033-00	METAL GLAZE	220 5% 1/10W	C152	1-164-337-11	CERAMIC CHIP 2.2MF	16V
R582	1-216-037-00	METAL GLAZE	330 5% 1/10W	C153	1-164-337-11	CERAMIC CHIP 2.2MF	16V
R583	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C154	1-164-337-11	CERAMIC CHIP 2.2MF	16V
R584	1-216-039-00	METAL GLAZE	390 5% 1/10W	C155	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R586	1-216-047-00	METAL GLAZE	820 5% 1/10W	C156	1-124-477-11	ELECT 47MF	20% 16V
R587	1-216-045-00	METAL GLAZE	680 5% 1/10W	C161	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R588	1-216-101-00	METAL GLAZE	150K 5% 1/10W	C162	1-164-222-11	CERAMIC CHIP 0.22MF	25V
R589	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C163	1-164-346-11	CERAMIC CHIP 1MF	16V
R590	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C164	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V
R591	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C165	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V
R592	1-216-232-00	METAL GLAZE	27K 5% 1/8W	C166	1-124-477-11	ELECT 47MF	20% 16V
R593	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W	C167	1-163-213-00	CERAMIC CHIP 0.0022MF	5% 50V
R594	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W	C168	1-164-346-11	CERAMIC CHIP 1MF	16V
R595	1-216-643-11	METAL CHIP	470 0.50% 1/10W	C170	1-124-477-11	ELECT 47MF	20% 16V
R596	1-216-670-11	METAL CHIP	6.2K 0.50% 1/10W	C171	1-124-477-11	ELECT 47MF	20% 16V
R597	1-216-230-00	METAL GLAZE	22K 5% 1/8W	C172	1-124-477-11	ELECT 47MF	20% 16V
R600	1-216-190-00	METAL GLAZE	470 5% 1/8W	C173	1-124-477-11	ELECT 47MF	20% 16V
R616	1-216-035-00	METAL GLAZE	270 5% 1/10W				
R628	1-249-412-11	CARBON	390 5% 1/4W F				
R681	1-216-397-11	METAL OXIDE	4.7 5% 3W F				
R684	1-216-047-00	METAL GLAZE	820 5% 1/10W				
R685	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
<FILTER>							
				CF2	1-527-839-00	FILTER, CERAMIC	
				CF3	1-527-840-00	FILTER, CERAMIC	
				CF4	1-567-570-11	FILTER, CERAMIC	
				SWF1	1-579-658-11	FILTER, SAWTOOTH WAVE	
<TUNER>							
TU101	1-693-185-11	TUNER (UV916H)	(KV-S3411A, S3411B, S3411D, S3413E)				
	1-693-184-11	TUNER (U944C)	(KV-S3412U)				
<CRYSTAL>							
X301	1-567-504-11	OSCILLATOR, CRYSTAL					
X302	1-567-505-11	OSCILLATOR, CRYSTAL					

1-466-733-11 IF BLOCK (IFH-389)							

(KV-S3411A, S3411D, S3413E)							
<CONNECTOR>							
CN1	1-750-173-11	PIN, CONNECTOR (PC BOARD)	10P				
CN2	1-750-173-11	PIN, CONNECTOR (PC BOARD)	10P				
<TRIMMER>							
CT1	1-404-801-11	TRAP, CERAMIC					
<DIODE>							
D161	8-719-400-18	DIODE MA152WK					
<IC>							
C101	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	IC1	8-759-070-76	IC M52308SP	
C102	1-164-222-11	CERAMIC CHIP 0.22MF	25V	IC2	8-759-070-71	IC TDA9820	
				IC3	8-759-514-54	IC BA7046	

IF(KV-S3411A/S3411D)
S3413F

IF(KV-S3411B)

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<COIL>											
L101	1-408-421-00	INDUCTOR	100UH	R120	1-216-075-00	METAL GLAZE	12K 5% 1/10W				
L102	1-408-419-00	INDUCTOR	68UH	R121	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W				
L103	1-408-419-00	INDUCTOR	68UH	R122	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				
L104	1-408-408-00	INDUCTOR	8.2UH	R123	1-216-075-00	METAL GLAZE	12K 5% 1/10W				
L121	1-408-413-00	INDUCTOR	22UH	R124	1-216-041-00	METAL GLAZE	470 5% 1/10W				
L122	1-408-420-00	INDUCTOR	82UH	R125	1-216-041-00	METAL GLAZE	470 5% 1/10W				
L142	1-410-790-41	INDUCTOR	0.56UH	R127	1-216-047-00	METAL GLAZE	820 5% 1/10W				
L151	1-408-419-00	INDUCTOR	68UH	R130	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
L161	1-408-419-00	INDUCTOR	68UH	R131	1-216-025-00	METAL GLAZE	100 5% 1/10W				
<TRANSISTOR>											
Q101	8-729-120-28	TRANSISTOR	2SC1623-L5L6	R150	1-216-043-00	METAL GLAZE	560 5% 1/10W				
Q102	8-729-216-22	TRANSISTOR	2SA1162-G	R151	1-216-043-00	METAL GLAZE	560 5% 1/10W				
Q121	8-729-120-28	TRANSISTOR	2SC1623-L5L6	R152	1-216-043-00	METAL GLAZE	560 5% 1/10W				
Q122	8-729-216-22	TRANSISTOR	2SA1162-G	R153	1-216-025-00	METAL GLAZE	100 5% 1/10W				
Q161	8-729-216-22	TRANSISTOR	2SA1162-G	R154	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
Q170	8-729-120-28	TRANSISTOR	2SC1623-L5L6	R155	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W				
Q171	8-729-120-28	TRANSISTOR	2SC1623-L5L6	R156	1-216-083-00	METAL GLAZE	27K 5% 1/10W				
Q172	8-729-120-28	TRANSISTOR	2SC1623-L5L6	R157	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W				
Q173	8-729-120-28	TRANSISTOR	2SC1623-L5L6	R159	1-216-107-00	METAL GLAZE	270K 5% 1/10W				
<RESISTOR>											
JR2	1-216-295-00	METAL GLAZE	0 5% 1/10W	R161	1-218-755-11	METAL CHIP	130K 0.50% 1/10W				
JR3	1-216-296-00	METAL GLAZE	0 5% 1/8W	R162	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
JR4	1-216-295-00	METAL GLAZE	0 5% 1/10W	R163	1-216-113-00	METAL GLAZE	470K 5% 1/10W				
JR7	1-216-295-00	METAL GLAZE	0 5% 1/10W	R164	1-216-113-00	METAL GLAZE	470K 5% 1/10W				
JR8	1-216-295-00	METAL GLAZE	0 5% 1/10W	R165	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
JR9	1-216-296-00	METAL GLAZE	0 5% 1/8W	R166	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
JR11	1-216-296-00	METAL GLAZE	0 5% 1/8W	R167	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
JR14	1-216-296-00	METAL GLAZE	0 5% 1/8W	R168	1-216-113-00	METAL GLAZE	470K 5% 1/10W				
JR16	1-216-295-00	METAL GLAZE	0 5% 1/10W	R169	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
JR18	1-216-295-00	METAL GLAZE	0 5% 1/10W	R170	1-216-083-00	METAL GLAZE	27K 5% 1/10W				
JR19	1-216-296-00	METAL GLAZE	0 5% 1/8W	R171	1-216-075-00	METAL GLAZE	12K 5% 1/10W				
JR20	1-216-296-00	METAL GLAZE	0 5% 1/8W	R172	1-216-095-00	METAL GLAZE	82K 5% 1/10W				
JR21	1-216-296-00	METAL GLAZE	0 5% 1/8W	R173	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
JR23	1-216-296-00	METAL GLAZE	0 5% 1/8W	R174	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
JR24	1-216-296-00	METAL GLAZE	0 5% 1/8W	R175	1-216-083-00	METAL GLAZE	27K 5% 1/10W				
JR25	1-216-296-00	METAL GLAZE	0 5% 1/8W	R176	1-216-075-00	METAL GLAZE	12K 5% 1/10W				
JR29	1-216-296-00	METAL GLAZE	0 5% 1/8W	R177	1-216-095-00	METAL GLAZE	82K 5% 1/10W				
JR30	1-216-295-00	METAL GLAZE	0 5% 1/10W	R178	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
JR33	1-216-295-00	METAL GLAZE	0 5% 1/10W	R179	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
JR38	1-216-296-00	METAL GLAZE	0 5% 1/8W	R180	1-216-037-00	METAL GLAZE	330 5% 1/10W				
JR39	1-216-296-00	METAL GLAZE	0 5% 1/8W	R181	1-216-037-00	METAL GLAZE	330 5% 1/10W				
JR40	1-216-296-00	METAL GLAZE	0 5% 1/8W	<VARIABLE RESISTOR>							
R101	1-216-075-00	METAL GLAZE	12K 5% 1/10W	RV1	1-241-121-11	RES. ADJ. CARBON 4.7K					
R102	1-216-073-00	METAL GLAZE	10K 5% 1/10W	<TRANSFORMER>							
R103	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	T4	1-416-017-21	COIL					
R104	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	T5	1-416-018-21	COIL					
R106	1-216-049-00	METAL GLAZE	1K 5% 1/10W	*****							
R107	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	1-466-735-11 IF BLOCK (IFH-389F) (KV-S3411B)							
R108	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	*****							
R110	1-216-041-00	METAL GLAZE	470 5% 1/10W	<CAPACITOR>							
R113	1-216-031-00	METAL GLAZE	180 5% 1/10W	C1	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V				
R114	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C2	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V				
R115	1-216-027-00	METAL GLAZE	120 5% 1/10W	C3	1-124-903-11	ELECT 1MF	20% 50V				
R116	1-216-101-00	METAL GLAZE	150K 5% 1/10W								
R117	1-216-097-00	METAL GLAZE	100K 5% 1/10W								
R118	1-216-117-00	METAL GLAZE	680K 5% 1/10W								
R119	1-216-240-00	METAL GLAZE	56K 5% 1/8W								

IF (KV-S3411B)

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C4	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V		<TRIMMER>	
C5	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V			
C6	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	CT1	1-404-801-11 TRAP, CERAMIC	
C7	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	CT2	1-409-429-11 TRAP, CERAMIC	
C8	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	CV1	1-141-245-00 CAP, TRIMMER	
C9	1-124-916-11	ELECT 22MF	20%	25V	CV2	1-141-245-00 CAP, TRIMMER	
C10	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	CV3	1-141-304-21 TRIMMER, CERAMIC	
C11	1-124-477-11	ELECT 47MF	20%	16V			
C13	1-163-059-00	CERAMIC CHIP 0.01MF	10%	50V		<DIODE>	
C14	1-124-477-11	ELECT 47MF	20%	16V	D7	8-719-421-57 DIODE MA73-TX	
C15	1-124-903-11	ELECT 1MF	20%	50V	D8	8-719-421-57 DIODE MA73-TX	
C16	1-163-061-00	CERAMIC CHIP 0.015MF	10%	50V	D9	8-719-421-57 DIODE MA73-TX	
C17	1-162-638-11	CERAMIC CHIP 1MF	16V				
C18	1-162-638-11	CERAMIC CHIP 1MF	16V				
C19	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V		<IC>	
C20	1-124-902-00	ELECT 0.47MF	20%	50V	IC1	8-759-070-75 IC M52312SP	
C21	1-124-903-11	ELECT 1MF	20%	50V	IC2	8-759-070-71 IC TDA9820	
C22	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	IC3	8-759-979-62 IC PCF8574	
C23	1-124-902-00	ELECT 0.47MF	20%	50V			
C24	1-164-506-11	CERAMIC CHIP 4.7MF	16V			<COIL>	
C25	1-124-477-11	ELECT 47MF	20%	16V	L1	1-408-419-00 INDUCTOR	68UH
C26	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	L2	1-408-419-00 INDUCTOR	68UH
C27	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	L3	1-408-407-00 INDUCTOR	6.8UH
C28	1-124-477-11	ELECT 47MF	20%	16V	L4	1-408-419-00 INDUCTOR	68UH
C33	1-124-907-11	ELECT 10MF	20%	50V	L5	1-408-419-00 INDUCTOR	68UH
C34	1-124-907-11	ELECT 10MF	20%	50V	L7	1-408-406-00 INDUCTOR	5.6UH
C35	1-124-925-11	ELECT 2.2MF	20%	50V	L9	1-408-419-00 INDUCTOR	68UH
C36	1-124-477-11	ELECT 47MF	20%	16V	L71	1-408-419-00 INDUCTOR	68UH
C37	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	L101	1-408-399-00 INDUCTOR	1.5UH
C38	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	L121	1-408-407-00 INDUCTOR	6.8UH
C40	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V			
C71	1-124-477-11	ELECT 47MF	20%	16V		<TRANSISTOR>	
C72	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V			
C80	1-124-477-11	ELECT 47MF	20%	16V	Q1	8-729-907-06 TRANSISTOR BF199-AMMO	
C83	1-124-477-11	ELECT 47MF	20%	16V	Q4	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
C84	1-124-477-11	ELECT 47MF	20%	16V	Q5	8-729-115-10 TRANSISTOR 2SK105A-10	
C85	1-124-477-11	ELECT 47MF	20%	16V	Q6	8-729-900-52 TRANSISTOR DTC114YK	
C86	1-124-477-11	ELECT 47MF	20%	16V	Q7	8-729-216-22 TRANSISTOR 2SA1162-G	
C87	1-124-477-11	ELECT 47MF	20%	16V			
C91	1-163-229-11	CERAMIC CHIP 12PF	5%	50V	Q8	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
C95	1-164-337-11	CERAMIC CHIP 2.2MF		16V	Q10	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
C101	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	Q11	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
C102	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	Q12	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
C104	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	Q13	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
C105	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	Q14	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
C106	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	Q15	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
C121	1-126-176-11	ELECT 220MF	20%	10V	Q16	8-729-216-22 TRANSISTOR 2SA1162-G	
C122	1-163-119-00	CERAMIC CHIP 120PF	5%	50V	Q101	8-729-104-80 TRANSISTOR 2SC3355	
C131	1-126-099-11	ELECT 2.2MF	20%	35V	Q121	8-729-120-28 TRANSISTOR 2SC1623-L5L6	
						<RESISTOR>	
		<FILTER>					
CF1	1-527-839-00	FILTER, CERAMIC			JR2	1-216-295-00 METAL GLAZE 0 5% 1/10W	
CF2	1-567-569-11	FILTER, CERAMIC			JR3	1-216-296-00 METAL GLAZE 0 5% 1/8W	
CF3	1-527-840-00	FILTER, CERAMIC			JR5	1-216-296-00 METAL GLAZE 0 5% 1/8W	
CF4	1-567-570-11	FILTER, CERAMIC			R1	1-216-025-00 METAL GLAZE 100 5% 1/10W	
SWF1	1-579-662-11	FILTER, SURFACE WAVE			R2	1-216-065-00 METAL GLAZE 4.7K 5% 1/10W	
SWF3	1-404-711-11	SAWF			R3	1-216-065-00 METAL GLAZE 4.7K 5% 1/10W	
SWF4	1-579-660-11	FILTER, SAWTOOTH WAVE			R4	1-216-041-00 METAL GLAZE 470 5% 1/10W	
		<CONNECTOR>			R5	1-216-021-00 METAL GLAZE 68 5% 1/10W	
CN1	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P			R6	1-216-055-00 METAL GLAZE 1.8K 5% 1/10W	
CN2	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P			R8	1-216-051-00 METAL GLAZE 1.2K 5% 1/10W	
					R9	1-216-069-00 METAL GLAZE 6.8K 5% 1/10W	

IF (KV-S3411B)

IF (KV-S3412U)

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK		
R10	1-216-071-00	METAL GLAZE	8.2K 5%	1/10W	R102	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W
R11	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	R103	1-216-063-00	METAL GLAZE	3.9K 5%	1/10W
R24	1-216-280-00	METAL GLAZE	2.7M 5%	1/8W	R104	1-216-049-00	METAL GLAZE	1K 5%	1/10W
R25	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	R105	1-216-033-00	METAL GLAZE	220 5%	1/10W
R26	1-216-061-00	METAL GLAZE	3.3K 5%	1/10W	R121	1-216-073-00	METAL GLAZE	10K 5%	1/10W
R27	1-216-266-00	METAL GLAZE	680K 5%	1/8W	R122	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W
R28	1-216-075-00	METAL GLAZE	12K 5%	1/10W	R123	1-216-041-00	METAL GLAZE	470 5%	1/10W
R29	1-216-035-00	METAL GLAZE	270 5%	1/10W	R124	1-216-041-00	METAL GLAZE	470 5%	1/10W
R30	1-216-049-00	METAL GLAZE	1K 5%	1/10W	R125	1-216-041-00	METAL GLAZE	470 5%	1/10W
R31	1-216-017-00	METAL GLAZE	47 5%	1/10W	R301	1-216-049-00	METAL GLAZE	1K 5%	1/10W
R32	1-216-043-00	METAL GLAZE	560 5%	1/10W	R302	1-216-049-00	METAL GLAZE	1K 5%	1/10W
R33	1-216-037-00	METAL GLAZE	330 5%	1/10W	R303	1-216-049-00	METAL GLAZE	1K 5%	1/10W
R34	1-216-252-00	METAL GLAZE	180K 5%	1/8W	R304	1-216-037-00	METAL GLAZE	330 5%	1/10W
R35	1-216-035-00	METAL GLAZE	270 5%	1/10W	R305	1-216-049-00	METAL GLAZE	1K 5%	1/10W
R36	1-216-029-00	METAL GLAZE	150 5%	1/10W	R306	1-216-025-00	METAL GLAZE	100 5%	1/10W
R37	1-216-049-00	METAL GLAZE	1K 5%	1/10W	R307	1-216-037-00	METAL GLAZE	330 5%	1/10W
R38	1-216-099-00	METAL GLAZE	120K 5%	1/10W	R308	1-216-037-00	METAL GLAZE	330 5%	1/10W
R39	1-216-089-00	METAL GLAZE	47K 5%	1/10W					
R40	1-216-049-00	METAL GLAZE	1K 5%	1/10W					
R42	1-216-061-00	METAL GLAZE	3.3K 5%	1/10W					
R43	1-216-067-00	METAL GLAZE	5.6K 5%	1/10W					
R44	1-216-027-00	METAL GLAZE	120 5%	1/10W	RV2	1-241-120-11	RES, ADJ, CARBON 2.2K		
R45	1-216-041-00	METAL GLAZE	470 5%	1/10W					
R46	1-216-031-00	METAL GLAZE	180 5%	1/10W					
R47	1-216-075-00	METAL GLAZE	12K 5%	1/10W					
R48	1-216-081-00	METAL GLAZE	22K 5%	1/10W	T1	1-404-806-21	COIL		
R49	1-216-049-00	METAL GLAZE	1K 5%	1/10W	T3	1-416-012-11	COIL		
R53	1-216-082-00	METAL GLAZE	24K 5%	1/10W	T4	1-416-012-11	COIL		
R54	1-216-043-00	METAL GLAZE	560 5%	1/10W	T5	1-402-720-11	COIL		
R55	1-216-043-00	METAL GLAZE	560 5%	1/10W					
R56	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W					
R57	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W					
R58	1-216-041-00	METAL GLAZE	470 5%	1/10W	X1	1-579-648-21	VIBRATOR, CERAMIC		
R59	1-216-043-00	METAL GLAZE	560 5%	1/10W					
R60	1-216-043-00	METAL GLAZE	560 5%	1/10W					
R61	1-216-295-00	METAL GLAZE	0 5%	1/10W					
R63	1-216-043-00	METAL GLAZE	560 5%	1/10W	1-466-734-11	IF BLOCK (IFH-395) (KV-S3412U)			
R71	1-216-079-00	METAL GLAZE	18K 5%	1/10W					
R72	1-216-079-00	METAL GLAZE	18K 5%	1/10W					
R73	1-216-049-00	METAL GLAZE	1K 5%	1/10W					
R74	1-216-079-00	METAL GLAZE	18K 5%	1/10W					
R75	1-216-079-00	METAL GLAZE	18K 5%	1/10W	C101	1-163-239-11	CERAMIC CHIP 33PF	5%	50V
R76	1-216-025-00	METAL GLAZE	100 5%	1/10W	C102	1-164-222-11	CERAMIC CHIP 0.22MF		25V
R77	1-216-174-00	METAL GLAZE	100 5%	1/8W	C103	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
R81	1-216-095-00	METAL GLAZE	82K 5%	1/10W	C104	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
					C105	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
R82	1-216-121-00	METAL GLAZE	1M 5%	1/10W	C106	1-124-477-11	ELECT 47MF	20%	16V
R83	1-216-025-00	METAL GLAZE	100 5%	1/10W	C107	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
R84	1-216-085-00	METAL GLAZE	33K 5%	1/10W	C108	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
R85	1-216-085-00	METAL GLAZE	33K 5%	1/10W	C109	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
R86	1-216-689-11	METAL GLAZE	39K 5%	1/10W	C112	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
					C113	1-163-101-00	CERAMIC CHIP 22PF	5%	50V
R87	1-216-095-00	METAL GLAZE	82K 5%	1/10W	C114	1-124-477-11	ELECT 47MF	20%	16V
R88	1-216-095-00	METAL GLAZE	82K 5%	1/10W	C115	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
R89	1-216-095-00	METAL GLAZE	82K 5%	1/10W	C116	1-164-346-11	CERAMIC CHIP 1MF		16V
R90	1-216-075-00	METAL GLAZE	12K 5%	1/10W	C118	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V
R91	1-216-295-00	METAL GLAZE	0 5%	1/10W					
					C119	1-163-369-11	CERAMIC CHIP 47PF	5%	50V
R92	1-216-075-00	METAL GLAZE	12K 5%	1/10W	C122	1-163-093-00	CERAMIC CHIP 10PF	5%	50V
R93	1-216-075-00	METAL GLAZE	12K 5%	1/10W	C130	1-216-295-00	METAL GLAZE 0	1/10W	
R94	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C131	1-163-224-11	CERAMIC CHIP 7PF	0.25PF	50V
R95	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W	C133	1-124-477-11	ELECT 47MF	20%	16V
R96	1-216-059-00	METAL GLAZE	2.7K 5%	1/10W					
					C161	1-163-117-00	CERAMIC CHIP 100PF	5%	50V
R97	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C162	1-164-222-11	CERAMIC CHIP 0.22MF		25V
R98	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C163	1-164-346-11	CERAMIC CHIP 1MF		16V
R99	1-216-057-00	METAL GLAZE	2.2K 5%	1/10W	C164	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V
R100	1-216-065-00	METAL GLAZE	4.7K 5%	1/10W					

IF (KV-S3412U)

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
C165	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	JR14	1-216-296-00	METAL GLAZE 0	5% 1/8W
C166	1-124-477-11	ELECT 47MF	20%	16V	JR16	1-216-295-00	METAL GLAZE 0	5% 1/10W
C167	1-163-213-00	CERAMIC CHIP 0.0022MF	5%	50V	JR18	1-216-295-00	METAL GLAZE 0	5% 1/10W
C168	1-164-346-11	CERAMIC CHIP 1MF		16V	JR19	1-216-296-00	METAL GLAZE 0	5% 1/8W
C170	1-124-477-11	ELECT 47MF	20%	16V	JR20	1-216-296-00	METAL GLAZE 0	5% 1/8W
C171	1-124-477-11	ELECT 47MF	20%	16V	JR21	1-216-296-00	METAL GLAZE 0	5% 1/8W
				JR23	1-216-296-00	METAL GLAZE 0	5% 1/8W	
				JR24	1-216-296-00	METAL GLAZE 0	5% 1/8W	
				JR25	1-216-296-00	METAL GLAZE 0	5% 1/8W	
		<FILTER>		JR29	1-216-296-00	METAL GLAZE 0	5% 1/8W	
CD1	1-579-657-21	DISCRIMINATOR, CERAMIC		JR30	1-216-295-00	METAL GLAZE 0	5% 1/10W	
CF1	1-567-569-11	FILTER, CERAMIC		JR33	1-216-295-00	METAL GLAZE 0	5% 1/10W	
SWF1	1-579-659-11	FILTER, SAWTOOTH WAVE		JR38	1-216-296-00	METAL GLAZE 0	5% 1/8W	
				JR39	1-216-296-00	METAL GLAZE 0	5% 1/8W	
		<CONNECTOR>		JR40	1-216-296-00	METAL GLAZE 0	5% 1/8W	
CN1	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P		JR41	1-216-295-00	METAL GLAZE 0	5% 1/10W	
CN2	1-750-173-11	PIN, CONNECTOR (PC BOARD) 10P		JR42	1-216-295-00	METAL GLAZE 0	5% 1/10W	
				JR101	1-216-295-00	METAL GLAZE 0	5% 1/10W	
				R101	1-216-075-00	METAL GLAZE 12K	5% 1/10W	
		<TRIMMER>		R102	1-216-045-00	METAL GLAZE 680	5% 1/10W	
CT1	1-409-333-00	TRAP, CERAMIC (6.0MHZ)		R103	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	
				R104	1-216-051-00	METAL GLAZE 1.2K	5% 1/10W	
				R105	1-216-043-00	METAL GLAZE 560	5% 1/10W	
				R106	1-216-049-00	METAL GLAZE 1K	5% 1/10W	
		<DIODE>		R107	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	
D161	8-719-400-18	DIODE MA152WK		R108	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W	
				R110	1-216-041-00	METAL GLAZE 470	5% 1/10W	
		<IC>		R112	1-216-045-00	METAL GLAZE 680	5% 1/10W	
IC1	8-759-070-76	IC M52308SP		R113	1-216-031-00	METAL GLAZE 180	5% 1/10W	
IC3	8-759-514-54	IC BA7046		R114	1-216-049-00	METAL GLAZE 1K	5% 1/10W	
				R115	1-216-031-00	METAL GLAZE 180	5% 1/10W	
				R116	1-216-101-00	METAL GLAZE 150K	5% 1/10W	
				R117	1-216-097-00	METAL GLAZE 100K	5% 1/10W	
				R118	1-216-117-00	METAL GLAZE 680K	5% 1/10W	
L101	1-408-414-00	INDUCTOR	27UH	R119	1-216-240-00	METAL GLAZE 56K	5% 1/8W	
L102	1-408-419-00	INDUCTOR	68UH	R120	1-216-075-00	METAL GLAZE 12K	5% 1/10W	
L103	1-408-419-00	INDUCTOR	68UH	R121	1-216-053-00	METAL GLAZE 1.5K	5% 1/10W	
L104	1-408-406-00	INDUCTOR	5.6UH	R122	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	
L105	1-408-410-00	INDUCTOR	12UH	R123	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	
L142	1-410-790-41	INDUCTOR	0.56UH	R130	1-216-049-00	METAL GLAZE 1K	5% 1/10W	
L161	1-408-419-00	INDUCTOR	68UH	R131	1-216-025-00	METAL GLAZE 100	5% 1/10W	
				R132	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W	
				R133	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W	
				R134	1-216-049-00	METAL GLAZE 1K	5% 1/10W	
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R135	1-216-198-00	METAL GLAZE 1K	5% 1/8W	
Q102	8-729-216-22	TRANSISTOR 2SA1162-G		R153	1-216-025-00	METAL GLAZE 100	5% 1/10W	
Q122	8-729-216-22	TRANSISTOR 2SA1162-G		R159	1-216-107-00	METAL GLAZE 270K	5% 1/10W	
Q161	8-729-216-22	TRANSISTOR 2SA1162-G		R160	1-216-049-00	METAL GLAZE 1K	5% 1/10W	
Q172	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R161	1-218-755-11	METAL CHIP 130K	0.50% 1/10W	
Q173	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R162	1-216-073-00	METAL GLAZE 10K	5% 1/10W	
				R163	1-216-113-00	METAL GLAZE 470K	5% 1/10W	
				R164	1-216-113-00	METAL GLAZE 470K	5% 1/10W	
				R165	1-216-081-00	METAL GLAZE 22K	5% 1/10W	
				R166	1-216-049-00	METAL GLAZE 1K	5% 1/10W	
JR1	1-216-296-00	METAL GLAZE 0	5% 1/8W	R167	1-216-073-00	METAL GLAZE 10K	5% 1/10W	
JR2	1-216-295-00	METAL GLAZE 0	5% 1/10W	R168	1-216-113-00	METAL GLAZE 470K	5% 1/10W	
JR3	1-216-296-00	METAL GLAZE 0	5% 1/8W	R169	1-216-049-00	METAL GLAZE 1K	5% 1/10W	
JR4	1-216-295-00	METAL GLAZE 0	5% 1/10W	R175	1-216-083-00	METAL GLAZE 27K	5% 1/10W	
JR7	1-216-295-00	METAL GLAZE 0	5% 1/10W	R176	1-216-075-00	METAL GLAZE 12K	5% 1/10W	
JR8	1-216-295-00	METAL GLAZE 0	5% 1/10W	R177	1-216-095-00	METAL GLAZE 82K	5% 1/10W	
JR9	1-216-296-00	METAL GLAZE 0	5% 1/8W	R178	1-216-059-00	METAL GLAZE 2.7K	5% 1/10W	
JR10	1-216-296-00	METAL GLAZE 0	5% 1/8W	R179	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W	
JR11	1-216-296-00	METAL GLAZE 0	5% 1/8W	R181	1-216-037-00	METAL GLAZE 330	5% 1/10W	
JR12	1-216-295-00	METAL GLAZE 0	5% 1/10W					
JR13	1-163-093-00	CERAMIC CHIP 10PF	5% 50V					

IF (KV-S3412U)

VW V

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<VARIABLE RESISTOR>											
.RV1	1-241-121-11	RES, ADJ, CARBON 4.7K		Q1708	8-729-901-59	TRANSISTOR BF199					
<TRANSFORMER>											
T4	1-416-017-21	COIL		Q1709	8-729-255-12	TRANSISTOR 2SC2551-0					
T5	1-416-018-21	COIL		<RESISTOR>							

*A-1342-189-A VM BOARD, COMPLETE											

4-382-854-11 SCREW (M3X10), P, SW (+)											
<CAPACITOR>											
C1701	1-124-119-00	ELECT	330MF	20%	16V	R1712	1-249-435-11	CARBON	33K	5%	1/4W
C1702	1-102-951-00	CERAMIC	15PF	5%	50V	R1713	1-249-438-11	CARBON	56K	5%	1/4W
C1703	1-102-115-00	CERAMIC	560PF	10%	50V	R1714	1-249-429-11	CARBON	10K	5%	1/4W
C1704	1-161-830-00	CERAMIC	0.0047MF		500V	R1715	1-216-476-11	METAL OXIDE	180	5%	3W
C1705	1-124-120-11	ELECT	220MF	20%	16V	R1716	1-249-417-11	CARBON	1K	5%	1/4W
C1706	1-123-935-00	ELECT	33MF	20%	160V	R1717	1-249-432-11	CARBON	18K	5%	1/4W
C1707	1-124-907-11	ELECT	10MF	20%	50V	R1718	1-249-412-11	CARBON	390	5%	1/4W
C1708	1-101-006-00	CERAMIC	0.047MF		50V	R1719	1-249-419-11	CARBON	1.5K	5%	1/4W
C1709	1-108-704-11	MYLAR	0.1MF	10%	200V	R1720	1-249-441-11	CARBON	100K	5%	1/4W
C1710	1-104-721-91	FILM	0.047MF	10%	250V	R1721	1-249-414-11	CARBON	560	5%	1/4W
C1711	1-162-318-11	CERAMIC	0.001MF	10%	500V	R1722	1-249-385-11	CARBON	2.2	5%	1/4W
C1712	1-124-799-11	ELECT	2.2MF	20%	160V	R1723	1-249-429-11	CARBON	10K	5%	1/4W
C1713	1-162-318-11	CERAMIC	0.001MF	10%	500V	R1724	1-249-436-11	CARBON	39K	5%	1/4W
C1714	1-104-721-91	FILM	0.047MF	10%	250V	R1725	1-249-416-11	CARBON	820	5%	1/4W
C1716	1-124-907-11	ELECT	10MF	20%	50V	R1726	1-249-414-11	CARBON	560	5%	1/4W
C1718	1-124-120-11	ELECT	220MF	20%	16V	R1727	1-249-402-11	CARBON	56	5%	1/4W
C1719	1-124-907-11	ELECT	10MF	20%	50V	R1729	1-216-451-11	METAL OXIDE	120	5%	2W
<CONNECTOR>											
CN1819*1-568-882-51	PIN, CONNECTOR 7P			*A-1347-069-A	V BOARD, COMPLETE						
CN1830*1-568-878-51	PIN, CONNECTOR 3P			*****							
<DIODE>											
D1701	8-719-911-19	DIODE ISS119		C01	1-124-916-11	ELECT	22MF	20%	50V		
D1702	8-719-911-19	DIODE ISS119		C02	1-163-038-00	CERAMIC CHIP	0.1MF		25V		
D1703	8-719-911-19	DIODE ISS119		C03	1-163-038-00	CERAMIC CHIP	0.1MF		25V		
D1704	8-719-982-37	DIODE MTZJ-39C		C04	1-124-916-11	ELECT	22MF	20%	50V		
D1705	8-719-982-37	DIODE MTZJ-39C		C05	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V		
D1706	8-719-911-19	DIODE ISS119		C06	1-124-120-11	ELECT	220MF	20%	16V		
D1707	8-719-911-19	DIODE ISS119		C07	1-124-903-11	ELECT	1MF	20%	50V		
<COIL>											
L1702	1-408-418-00	INDUCTOR	56UH	C08	1-163-097-00	CERAMIC CHIP	15PF	5%	50V		
<TRANSISTOR>											
Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE		C09	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V		
Q1702	8-729-173-38	TRANSISTOR 2SA733-K		C10	1-163-133-00	CERAMIC CHIP	470PF	5%	50V		
Q1703	8-729-017-05	TRANSISTOR 2SA1837		C11	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V		
Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE		C12	1-163-127-00	CERAMIC CHIP	270PF	5%	50V		
Q1705	8-729-017-06	TRANSISTOR 2SC4793		C13	1-163-117-00	CERAMIC CHIP	100PF	5%	50V		
Q1706	8-729-119-78	TRANSISTOR 2SC2785-HFE		C14	1-163-097-00	CERAMIC CHIP	15PF	5%	50V		
Q1707	8-729-140-96	TRANSISTOR 2SD774-34		C15	1-163-103-00	CERAMIC CHIP	27PF	5%	50V		
<CAPACITOR>											
Q1701	8-729-119-78	TRANSISTOR 2SC2785-HFE		C16	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V		
Q1702	8-729-173-38	TRANSISTOR 2SA733-K		C17	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V		
Q1703	8-729-017-05	TRANSISTOR 2SA1837		C18	1-163-093-00	CERAMIC CHIP	10PF	5%	50V		
Q1704	8-729-119-78	TRANSISTOR 2SC2785-HFE		C19	1-163-089-00	CERAMIC CHIP	6PF	0.25PF	50V		
Q1705	8-729-017-06	TRANSISTOR 2SC4793		C20	1-163-125-00	CERAMIC CHIP	220PF	5%	50V		
Q1706	8-729-119-78	TRANSISTOR 2SC2785-HFE		C21	1-163-833-00	CERAMIC CHIP	0.068MF		25V		
Q1707	8-729-140-96	TRANSISTOR 2SD774-34		C22	1-163-117-00	CERAMIC CHIP	100PF	5%	50V		

V H1

J B

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
R951	1-216-063-00	METAL GLAZE	3.9K 5%	1/10W			<CONNECTOR>				
R952	1-216-113-00	METAL GLAZE	470K 5%	1/10W			CN0302*1-573-299-11 CONNECTOR, BOARD TO BOARD 10P				
R953	1-216-188-00	METAL GLAZE	390 5%	1/8W							
R954	1-216-039-00	METAL GLAZE	390 5%	1/10W							
R955	1-216-039-00	METAL GLAZE	390 5%	1/10W							
R956	1-216-089-00	METAL GLAZE	47K 5%	1/10W			<DIODE>				
R957	1-216-039-00	METAL GLAZE	390 5%	1/10W	D1301	8-719-400-18 DIODE MA152WK					
R958	1-216-089-00	METAL GLAZE	47K 5%	1/10W							
R959	1-216-071-00	METAL GLAZE	8.2K 5%	1/10W							
R960	1-216-071-00	METAL GLAZE	8.2K 5%	1/10W			<FILTER>				
R961	1-216-071-00	METAL GLAZE	8.2K 5%	1/10W	FL1301	1-239-550-41 FILTER, LOW PASS					
R965	1-216-029-00	METAL GLAZE	150 5%	1/10W	FL1302	1-239-550-41 FILTER, LOW PASS					
R966	1-216-029-00	METAL GLAZE	150 5%	1/10W	FL1303	1-239-550-41 FILTER, LOW PASS					
R967	1-216-029-00	METAL GLAZE	150 5%	1/10W	FL1304	1-236-164-11 ENCAPSULATED COMPONENT					
R968	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W							
R969	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W			<IC>				
R970	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W	IC1301	8-752-357-88 IC CXD2024Q-TL					
R971	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W							
R972	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W							
R973	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W							
R974	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W	L1301	1-408-405-00 INDUCTOR	4.7UH				
R975	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W	L1302	1-408-403-00 INDUCTOR	3.3UH				
R976	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W	L1303	1-408-405-00 INDUCTOR	4.7UH				
R977	1-216-055-00	METAL GLAZE	1.8K 5%	1/10W	L1304	1-408-405-00 INDUCTOR	4.7UH				

*A-1620-049-A B BOARD, COMPLETE				<TRANSISTOR>							

<CAPACITOR>											
C1301	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	Q1301	8-729-216-22 TRANSISTOR 2SA1162-G					
C1302	1-126-101-11	ELECT 100MF	20%	16V	Q1302	8-729-216-22 TRANSISTOR 2SA1162-G					
C1303	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	Q1303	8-729-216-22 TRANSISTOR 2SA1162-G					
C1304	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	Q1304	8-729-901-81 TRANSISTOR 2SC2412K-T-146-R					
C1305	1-163-105-00	CERAMIC CHIP 33PF	5%	50V	Q1305	8-729-901-81 TRANSISTOR 2SC2412K-T-146-R					
C1306	1-163-109-00	CERAMIC CHIP 47PF	5%	50V	Q1306	8-729-901-81 TRANSISTOR 2SC2412K-T-146-R					
C1307	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	Q1307	8-729-216-22 TRANSISTOR 2SA1162-G					
C1308	1-163-101-00	CERAMIC CHIP 22PF	5%	50V	Q1308	8-729-216-22 TRANSISTOR 2SA1162-G					
C1309	1-163-101-00	CERAMIC CHIP 22PF	5%	50V	Q1309	8-729-216-22 TRANSISTOR 2SA1162-G					
C1310	1-126-101-11	ELECT 100MF	20%	16V	Q1310	8-729-216-22 TRANSISTOR 2SA1162-G					
C1311	1-163-038-00	CERAMIC CHIP 0.1MF		25V			<RESISTOR>				
C1312	1-163-133-00	CERAMIC CHIP 470PF	5%	50V	R1301	1-216-053-00 METAL GLAZE 1.5K 5% 1/10W					
C1313	1-124-917-11	ELECT 33MF	20%	50V	R1302	1-216-059-00 METAL GLAZE 2.7K 5% 1/10W					
C1314	1-126-101-11	ELECT 100MF	20%	16V	R1303	1-216-043-00 METAL GLAZE 560 5% 1/10W					
C1315	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1304	1-216-043-00 METAL GLAZE 560 5% 1/10W					
C1316	1-126-101-11	ELECT 100MF	20%	16V	R1305	1-216-067-00 METAL GLAZE 5.6K 5% 1/10W					
C1317	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1306	1-216-073-00 METAL GLAZE 10K 5% 1/10W					
C1318	1-124-910-11	ELECT 47MF	20%	50V	R1307	1-216-069-00 METAL GLAZE 6.8K 5% 1/10W					
C1319	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1308	1-216-069-00 METAL GLAZE 6.8K 5% 1/10W					
C1320	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	R1309	1-216-055-00 METAL GLAZE 1.8K 5% 1/10W					
C1321	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1310	1-216-295-00 METAL GLAZE 0 5% 1/10W					
C1322	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1311	1-216-073-00 METAL GLAZE 10K 5% 1/10W					
C1323	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1312	1-216-057-00 METAL GLAZE 2.2K 5% 1/10W					
C1324	1-126-101-11	ELECT 100MF	20%	16V	R1313	1-216-089-00 METAL GLAZE 47K 5% 1/10W					
C1325	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1314	1-216-065-00 METAL GLAZE 4.7K 5% 1/10W					
C1326	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1315	1-216-049-00 METAL GLAZE 1K 5% 1/10W					
C1327	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1316	1-216-071-00 METAL GLAZE 8.2K 5% 1/10W					
C1328	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1317	1-216-083-00 METAL GLAZE 27K 5% 1/10W					
C1329	1-163-038-00	CERAMIC CHIP 0.1MF		25V	R1318	1-216-051-00 METAL GLAZE 1.2K 5% 1/10W					
C1330	1-163-038-00	CERAMIC CHIP 0.1MF		25V	R1319	1-216-043-00 METAL GLAZE 560 5% 1/10W					
C1331	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1320	1-216-067-00 METAL GLAZE 5.6K 5% 1/10W					
C1332	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1321	1-216-049-00 METAL GLAZE 1K 5% 1/10W					
C1333	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	R1322	1-216-025-00 METAL GLAZE 100 5% 1/10W					
					R1324	1-216-055-00 METAL GLAZE 1.8K 5% 1/10W					

B P

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
R1325	1-216-043-00	METAL GLAZE	560 5% 1/10W	C1448	1-164-222-11	CERAMIC CHIP 0.22MF	25V				
R1326	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C1449	1-163-257-11	CERAMIC CHIP 180PF	5% 50V				
R1327	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C1450	1-164-005-11	CERAMIC CHIP 0.47MF	25V				
R1330	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	C1452	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
R1331	1-216-049-00	METAL GLAZE	1K 5% 1/10W	C1453	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
R1332	1-216-653-11	METAL CHIP	1.2K 0.50% 1/10W	C1454	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
R1333	1-216-666-11	METAL CHIP	4.3K 0.50% 1/10W	C1455	1-163-133-00	CERAMIC CHIP 470PF	5% 50V				
R1334	1-216-635-11	METAL CHIP	220 0.50% 1/10W	C1456	1-163-133-00	CERAMIC CHIP 470PF	5% 50V				
R1335	1-216-637-11	METAL CHIP	270 0.50% 1/10W	C1457	1-164-005-11	CERAMIC CHIP 0.47MF	25V				
R1336	1-216-657-11	METAL CHIP	1.8K 0.50% 1/10W	C1460	1-163-038-00	CERAMIC CHIP 0.1MF	25V				
R1337	1-216-663-11	METAL CHIP	3.3K 0.50% 1/10W	C1461	1-164-005-11	CERAMIC CHIP 0.47MF	25V				
R1338	1-216-657-11	METAL CHIP	1.8K 0.50% 1/10W	C1462	1-164-005-11	CERAMIC CHIP 0.47MF	25V				
R1339	1-216-295-00	METAL GLAZE	0 5% 1/10W	C1463	1-126-101-11	ELECT 100MF	20% 16V				
R1342	1-216-295-00	METAL GLAZE	0 5% 1/10W	C1464	1-126-101-11	ELECT 100MF	20% 16V				
R1343	1-216-035-00	METAL GLAZE	270 5% 1/10W	C1465	1-126-101-11	ELECT 100MF	20% 16V				
R1344	1-216-035-00	METAL GLAZE	270 5% 1/10W	C1466	1-126-101-11	ELECT 100MF	20% 16V				
R1345	1-216-035-00	METAL GLAZE	270 5% 1/10W	C1467	1-126-101-11	ELECT 100MF	20% 16V				
R1346	1-216-035-00	METAL GLAZE	270 5% 1/10W	C1471	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
<hr/>											
*A-1622-005-A P BOARD, COMPLETE											
<hr/>											
<CAPACITOR>											
C1401	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C1472	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C1402	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C1473	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V				
C1403	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C1481	1-216-295-00	METAL GLAZE 0	5% 1/10W				
C1404	1-163-037-11	CERAMIC CHIP 0.022MF	10% 25V	C1482	1-163-001-11	CERAMIC CHIP 220PF	10% 50V				
C1405	1-163-097-00	CERAMIC CHIP 15PF	5% 50V	C1491	1-124-907-11	ELECT 10MF	20% 50V				
<hr/>											
<CONNECTOR>											
CN1514*1-568-879-51		PIN, CONNECTOR 4P		CN1515*1-564-516-11		PLUG, CONNECTOR 13P					
CN1516*1-568-879-11		PIN, CONNECTOR 4P		CN1538*1-573-299-11		CONNECTOR, BOARD TO BOARD 10P					
<hr/>											
<DIODE>											
D1401	8-719-401-41	DIODE MA3051L-TX									
<hr/>											
<FILTER>											
FL1403	1-236-071-11	ENCAPSULATED COMPONENT		FL1404	1-236-071-11	ENCAPSULATED COMPONENT					
FL1405	1-236-071-11	ENCAPSULATED COMPONENT		FL1406	1-236-071-11	ENCAPSULATED COMPONENT					
FL1407	1-236-071-11	ENCAPSULATED COMPONENT		FL1408	1-236-071-11	ENCAPSULATED COMPONENT					
<hr/>											
<IC>											
IC1401	8-759-073-16	IC TDA9160/N2		IC1402	8-759-086-97	IC TDA4661T/V2					
IC1403	8-759-055-51	IC SDA9087XGEG		IC1404	8-759-055-52	IC SDA9089XGEG					
IC1405	8-759-046-27	IC SDA9086-3									
<hr/>											
<COIL>											
L1401	1-408-418-00	INDUCTOR	56UH	L1405	1-408-407-00	INDUCTOR	6.8UH				
L1406	1-408-407-00	INDUCTOR	6.8UH								
<hr/>											
<TRANSISTOR>											
Q1401	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R									
C1446	1-164-005-11	CERAMIC CHIP 0.47MF	25V	C1447	1-163-038-00	CERAMIC CHIP 0.1MF	25V				

H1	H2	J
----	----	---

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
C087	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	C291	1-101-005-00	CERAMIC 0.022MF	50V
		<CONNECTOR>		C292	1-101-005-00	CERAMIC 0.022MF	50V	
				C293	1-101-003-00	CERAMIC 0.0047MF	50V	
				C294	1-101-003-00	CERAMIC 0.0047MF	50V	
CN1008*1-564-516-11	PLUG, CONNECTOR 13P			C295	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	
	<JACK>			C296	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	
J81	1-568-678-11	TERMINAL BLOCK, S 3P		C901	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	
J82	1-562-837-11	JACK		C902	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	
	<COIL>			C904	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	
L081	1-408-409-00	INDUCTOR	10UH	C905	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	
L082	1-408-409-00	INDUCTOR	10UH	C906	1-101-004-00	CERAMIC 0.01MF	50V	
	<RESISTOR>			C907	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	
JR021	1-216-295-00	METAL GLAZE	0 5%	C908	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	
R081	1-216-073-00	METAL GLAZE	10K 5%	C909	1-101-004-00	CERAMIC 0.01MF	50V	
R082	1-216-065-00	METAL GLAZE	4.7K 5%	C910	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	
R083	1-216-057-00	METAL GLAZE	2.2K 5%	C911	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	
R084	1-216-202-00	METAL GLAZE	1.5K 5%	C912	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	
R085	1-216-202-00	METAL GLAZE	1.5K 5%	C913	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	
	<SWITCH>			C914	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	
S081	1-571-532-21	SWITCH, TACTIL		C915	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	
S082	1-571-532-21	SWITCH, TACTIL		C916	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	
S083	1-571-532-21	SWITCH, TACTIL		C917	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	
*****	*****	*****	*****	C918	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	
*1-642-997-11	H2 BOARD			C919	1-163-133-00	CERAMIC CHIP 470PF	5% 50V	
	*****			C920	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	
*4-201-076-01	HOLDER, LED			C921	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	
*4-374-987-01	GUIDE, LIGHT			C922	1-124-477-11	ELECT 47MF	20% 16V	
4-381-686-01	BRACKET (B), LIGHT GUIDE			C923	1-164-346-11	CERAMIC CHIP 1MF	16V	
				C924	1-124-477-11	ELECT 47MF	20% 16V	
	<CONNECTOR>			C925	1-124-477-11	ELECT 47MF	20% 16V	
CN1132*1-568-882-51	PIN, CONNECTOR 7P			C926	1-164-346-11	CERAMIC CHIP 1MF	16V	
	<DIODE>			C927	1-124-477-11	ELECT 47MF	20% 16V	
D092	8-719-948-31	DIODE LD-201VR		C928	1-124-477-11	ELECT 47MF	20% 16V	
D093	8-719-948-31	DIODE LD-201VR		C929	1-124-477-11	ELECT 47MF	20% 16V	
D094	8-719-948-31	DIODE LD-201VR		C930	1-124-477-11	ELECT 47MF	20% 16V	
	<IC>			C931	1-164-346-11	CERAMIC CHIP 1MF	16V	
IC091	8-741-101-75	IC SBX1610-11		C932	1-164-346-11	CERAMIC CHIP 1MF	16V	
	<RESISTOR>			C933	1-124-477-11	ELECT 47MF	20% 16V	
R091	1-249-413-11	CARBON	470 5%	C934	1-124-477-11	ELECT 47MF	20% 16V	
*****	*****	*****	*****	C935	1-124-477-11	ELECT 47MF	20% 16V	
*A-1388-145-A	J BOARD, COMPLETE			C936	1-164-346-11	CERAMIC CHIP 1MF	16V	
	*****			C937	1-164-346-11	CERAMIC CHIP 1MF	16V	
	<CAPACITOR>			C938	1-124-477-11	ELECT 47MF	20% 16V	
C281	1-126-103-11	ELECT	470MF					

CN1209 1-695-302-11 CONNECTOR, BOARD TO BOARD 50P
CN1210*1-564-522-11 PLUG, CONNECTOR 7P
CN1233*1-564-518-11 PLUG, CONNECTOR 3P
CN1240*1-564-518-11 PLUG, CONNECTOR 3P

<DIODE>

D901 8-719-921-69 DIODE MTZJ-9.1
D902 8-719-921-69 DIODE MTZJ-9.1
D903 8-719-921-69 DIODE MTZJ-9.1
D904 8-719-921-69 DIODE MTZJ-9.1
D905 8-719-921-69 DIODE MTZJ-9.1

D906 8-719-921-69 DIODE MTZJ-9.1
D907 8-719-921-69 DIODE MTZJ-9.1
D908 8-719-921-69 DIODE MTZJ-9.1
D909 8-719-921-69 DIODE MTZJ-9.1
D910 8-719-921-69 DIODE MTZJ-9.1

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D911	8-719-921-69	DIODE MTZJ-9.1		JR944	1-216-295-00	METAL GLAZE 0 5%	1/10W
D912	8-719-921-69	DIODE MTZJ-9.1		JR946	1-216-296-00	METAL GLAZE 0 5%	1/8W
D913	8-719-921-69	DIODE MTZJ-9.1		JR947	1-216-295-00	METAL GLAZE 0 5%	1/10W
D914	8-719-921-69	DIODE MTZJ-9.1		JR952	1-216-296-00	METAL GLAZE 0 5%	1/8W
D915	8-719-921-69	DIODE MTZJ-9.1		JR954	1-216-295-00	METAL GLAZE 0 5%	1/10W
D916	8-719-921-69	DIODE MTZJ-9.1		JR955	1-216-295-00	METAL GLAZE 0 5%	1/10W
D917	8-719-921-69	DIODE MTZJ-9.1		JR956	1-216-295-00	METAL GLAZE 0 5%	1/10W
D918	8-719-921-69	DIODE MTZJ-9.1		JR957	1-216-295-00	METAL GLAZE 0 5%	1/10W
D919	8-719-921-69	DIODE MTZJ-9.1		R283	1-216-073-00	METAL GLAZE 10K 5%	1/10W
D920	8-719-921-69	DIODE MTZJ-9.1		R284	1-216-073-00	METAL GLAZE 10K 5%	1/10W
D921	8-719-921-69	DIODE MTZJ-9.1		R287	1-216-216-00	METAL GLAZE 5.6K 5%	1/8W
D922	8-719-921-69	DIODE MTZJ-9.1		R288	1-216-216-00	METAL GLAZE 5.6K 5%	1/8W
D923	8-719-921-69	DIODE MTZJ-9.1		R289	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
D924	8-719-921-69	DIODE MTZJ-9.1		R290	1-216-216-00	METAL GLAZE 5.6K 5%	1/8W
D925	8-719-921-69	DIODE MTZJ-9.1		R291	1-249-413-11	CARBON 470 5%	1/4W
D926	8-719-921-69	DIODE MTZJ-9.1		R292	1-249-413-11	CARBON 470 5%	1/4W
D927	8-719-921-69	DIODE MTZJ-9.1		R901	1-216-039-00	METAL GLAZE 390 5%	1/10W
D928	8-719-921-69	DIODE MTZJ-9.1		R902	1-216-039-00	METAL GLAZE 390 5%	1/10W
				R903	1-216-113-00	METAL GLAZE 470K 5%	1/10W
<JACK>							
J291	1-536-996-21	TERMINAL BOARD, INPUT/OUTPUT		R904	1-216-113-00	METAL GLAZE 470K 5%	1/10W
J901	1-695-296-11	TERMINAL BLOCK, S		R905	1-216-188-00	METAL GLAZE 390 5%	1/8W
J903	1-695-550-11	SOCKET 21P		R906	1-216-039-00	METAL GLAZE 390 5%	1/10W
J904	1-695-296-11	TERMINAL BLOCK, S		R907	1-216-029-00	METAL GLAZE 150 5%	1/10W
J905	1-695-293-11	SOCKET 21P		R908	1-216-029-00	METAL GLAZE 150 5%	1/10W
J906	1-695-296-11	TERMINAL BLOCK, S		R909	1-216-113-00	METAL GLAZE 470K 5%	1/10W
J907	1-695-293-11	SOCKET 21P		R910	1-216-113-00	METAL GLAZE 470K 5%	1/10W
				R911	1-216-022-00	METAL GLAZE 75 5%	1/10W
				R913	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
				R914	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
<COIL>							
L281	1-402-711-11	INDUCTOR, WIDEBAND		R915	1-216-113-00	METAL GLAZE 470K 5%	1/10W
L283	1-402-711-11	INDUCTOR, WIDEBAND		R916	1-216-113-00	METAL GLAZE 470K 5%	1/10W
L291	1-402-711-11	INDUCTOR, WIDEBAND		R917	1-216-022-00	METAL GLAZE 75 5%	1/10W
L292	1-402-711-11	INDUCTOR, WIDEBAND		R919	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
				R920	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
				R921	1-216-022-00	METAL GLAZE 75 5%	1/10W
				R922	1-216-222-00	METAL GLAZE 10K 5%	1/8W
				R923	1-216-039-00	METAL GLAZE 390 5%	1/10W
				R924	1-216-039-00	METAL GLAZE 390 5%	1/10W
				R925	1-216-089-00	METAL GLAZE 47K 5%	1/10W
				R926	1-216-039-00	METAL GLAZE 390 5%	1/10W
				R927	1-216-039-00	METAL GLAZE 390 5%	1/10W
				R928	1-216-089-00	METAL GLAZE 47K 5%	1/10W
				R929	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
				R930	1-216-113-00	METAL GLAZE 470K 5%	1/10W
<TRANSISTOR>							
Q281	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R931	1-216-212-00	METAL GLAZE 3.9K 5%	1/8W
Q282	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R932	1-216-113-00	METAL GLAZE 470K 5%	1/10W
				R933	1-216-073-00	METAL GLAZE 10K 5%	1/10W
				R934	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
				R935	1-216-022-00	METAL GLAZE 75 5%	1/10W
				R936	1-216-022-00	METAL GLAZE 75 5%	1/10W
				R937	1-216-113-00	METAL GLAZE 470K 5%	1/10W
				R938	1-216-039-00	METAL GLAZE 390 5%	1/10W
				R939	1-216-188-00	METAL GLAZE 390 5%	1/8W
				R940	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W
				R941	1-216-113-00	METAL GLAZE 470K 5%	1/10W
				R942	1-216-188-00	METAL GLAZE 390 5%	1/8W
				R943	1-216-089-00	METAL GLAZE 47K 5%	1/10W
				R944	1-216-188-00	METAL GLAZE 390 5%	1/8W
				R945	1-216-089-00	METAL GLAZE 47K 5%	1/10W
				R946	1-216-022-00	METAL GLAZE 75 5%	1/10W
				R947	1-216-029-00	METAL GLAZE 150 5%	1/10W
				R948	1-216-073-00	METAL GLAZE 10K 5%	1/10W
				R949	1-216-113-00	METAL GLAZE 470K 5%	1/10W
				R950	1-216-063-00	METAL GLAZE 3.9K 5%	1/10W

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
Q1402	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1449	1-216-033-00	METAL GLAZE	220 5% 1/10W				
Q1403	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1450	1-216-033-00	METAL GLAZE	220 5% 1/10W				
Q1404	8-729-216-22	TRANSISTOR 2SA1162-G		R1451	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
Q1405	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1453	1-216-025-00	METAL GLAZE	100 5% 1/10W				
Q1406	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1454	1-216-025-00	METAL GLAZE	100 5% 1/10W				
Q1407	8-729-216-22	TRANSISTOR 2SA1162-G		R1455	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
Q1408	8-729-216-22	TRANSISTOR 2SA1162-G		R1456	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
Q1409	8-729-216-22	TRANSISTOR 2SA1162-G		R1458	1-216-041-00	METAL GLAZE	470 5% 1/10W				
Q1413	8-729-216-22	TRANSISTOR 2SA1162-G		R1461	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
Q1414	8-729-900-53	TRANSISTOR DTC114EK		R1462	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
Q1415	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1463	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
Q1416	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1465	1-216-198-00	METAL GLAZE	1K 5% 1/8W				
Q1417	8-729-900-53	TRANSISTOR DTC114EK		R1471	1-216-037-00	METAL GLAZE	330 5% 1/10W				
Q1418	8-729-900-53	TRANSISTOR DTC114EK		R1484	1-216-295-00	METAL GLAZE	0 5% 1/10W				
Q1419	8-729-900-53	TRANSISTOR DTC114EK		R1485	1-216-041-00	METAL GLAZE	470 5% 1/10W				
Q1421	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1486	1-216-033-00	METAL GLAZE	220 5% 1/10W				
Q1422	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1487	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
Q1423	8-729-901-00	TRANSISTOR DTC124EK		R1488	1-216-025-00	METAL GLAZE	100 5% 1/10W				
Q1424	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R1492	1-216-033-00	METAL GLAZE	220 5% 1/10W				
<RESISTOR>											
JR1401	1-216-295-00	METAL GLAZE	0 5% 1/10W	R1493	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
JR1402	1-216-295-00	METAL GLAZE	0 5% 1/10W	R1494	1-216-174-00	METAL GLAZE	100 5% 1/8W				
JR1403	1-216-295-00	METAL GLAZE	0 5% 1/10W	R1495	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W				
JR1405	1-216-295-00	METAL GLAZE	0 5% 1/10W	R1496	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R1401	1-216-097-00	METAL GLAZE	100K 5% 1/10W	R1497	1-216-041-00	METAL GLAZE	470 5% 1/10W				
R1402	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1498	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W				
R1403	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1499	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R1404	1-216-025-00	METAL GLAZE	100 5% 1/10W	<CRYSTAL>							
R1405	1-216-049-00	METAL GLAZE	1K 5% 1/10W	X1401	1-567-505-11	OSCILLATOR, CRYSTAL					
R1406	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W	X1402	1-567-504-11	OSCILLATOR, CRYSTAL					

*A-1624-017-A F2 BOARD, COMPLETE											

<CAPACITOR>											
C661	Δ 1-136-519-11	FILM	D.47MF 20% 300V	C662	Δ 1-136-518-11	FILM	0.33MF 20% 300V				
C664	Δ 1-164-246-61	CERAMIC	0.0022MF 20% 400V	C666	1-124-120-11	ELECT	220MF 20% 25V				
C667	1-126-233-11	ELECT	22MF 20% 50V	C672	Δ 1-161-964-91	CERAMIC	0.0047MF 250V				
C673	Δ 1-161-964-91	CERAMIC	0.0047MF 250V	C674	1-125-555-11	ELECT	330MF 20% 400V				
C675	1-136-527-12	FILM	0.47MF 20% 300V	C675	1-136-527-12	FILM	0.47MF 20% 300V				
<CONNECTOR>											
CN0005	*1-508-765-00	PIN, CONNECTOR (5MM PITCH)	3P	CN0006	*1-508-765-00	PIN, CONNECTOR (5MM PITCH)	3P				
CN0007	*1-508-786-00	PIN, CONNECTOR (5MM PITCH)	2P	CN0924	*1-568-878-51	PIN, CONNECTOR 3P					
CN0925	*1-695-294-11	PIN, CONNECTOR (PC BOARD)	6P	CN0929	*1-508-784-00	PIN, CONNECTOR (5MM PITCH)	1P				
CN0931	Δ *1-691-291-11	PIN, CONNECTOR (PC BOARD)	5P	*****							
<DIODE>											
D661	8-719-911-19	DIODE	ISS119	D662	8-719-400-18	DIODE	MA152WK				
D663	8-719-510-63	DIODE	D4SB60L-F	D664	8-719-921-69	DIODE	MTZJ-9.1				

Les composants identifiés par une trame et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<TRANSFORMER>											
LF661 Δ	1-424-436-11	TRANSFORMER, LINE FILTER		C512	1-126-103-11	ELECT	470MF 20%				
LF662 Δ	1-424-436-11	TRANSFORMER, LINE FILTER		C514	1-163-105-00	CERAMIC CHIP	33PF 5%				
LF663 Δ	1-421-862-11	LFT		C519	1-164-161-11	CERAMIC CHIP	0.0022MF 10%				
				C522	1-163-141-00	CERAMIC CHIP	0.001MF 5%				
<TRANSISTOR>											
Q661	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		C523	1-163-141-00	CERAMIC CHIP	0.001MF 5%				
<RESISTOR>											
R663 Δ	1-244-945-91	CARBON 1M 5% 1/2W		C531	1-164-493-11	CERAMIC CHIP	0.047MF 10%				
R664 Δ	1-205-998-11	WIREWOUND 1 5% 10W		C532	1-164-489-11	CERAMIC CHIP	0.22MF 10%				
R665 Δ	1-218-265-91	METAL GLAZE 8.2M 5% 1W		C538	1-164-489-11	CERAMIC CHIP	0.22MF 10%				
R666	1-249-405-11	CARBON 100 5% 1/4W F		C541	1-164-232-11	CERAMIC CHIP	0.01MF 10%				
R667	1-249-430-11	CARBON 12K 5% 1/4W		C542	1-163-037-11	CERAMIC CHIP	0.022MF 10%				
R668	1-249-434-11	CARBON 27K 5% 1/4W		C543	1-164-161-11	CERAMIC CHIP	0.0022MF 10%				
R669 Δ	1-202-968-11	WIREWOUND 1.2 5% 10W		C544	1-164-161-11	CERAMIC CHIP	0.0022MF 10%				
R670 Δ	1-205-998-11	WIREWOUND 1 5% 10W		C546	1-164-004-11	CERAMIC CHIP	0.1MF 10%				
R671	1-249-415-11	CARBON 680 5% 1/4W F		C547	1-163-020-00	CERAMIC CHIP	0.0082MF 10%				
<RELAY>											
RY661 Δ	1-515-720-31	RELAY		C549	1-163-989-11	CERAMIC CHIP	0.033MF 10%				
<THERMISTOR>											
THP661 Δ	1-809-827-11	THERMISTOR, POSITIVE		C550	1-163-141-00	CERAMIC CHIP	0.001MF 5%				

*A-1635-001-A M BOARD, COMPLETE											

<CAPACITOR>											
C001	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	CN1406*1-568-880-51	PIN, CONNECTOR 5P						
C003	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	CN1413 1-695-301-11	CONNECTOR, BOARD TO BOARD 40P						
C007	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	CN1426*1-568-881-51	PIN, CONNECTOR 6P						
C008	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	CN1432*1-568-882-51	PIN, CONNECTOR 7P						
C010	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	CN1441*1-564-511-31	PLUG, CONNECTOR 8P						
C011	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	<DIODE>							
C012	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	D001	8-719-027-82	DIODE MA3039H-TX					
C014	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	D501	8-719-800-76	DIODE 1SS226					
C016	1-163-141-00	CERAMIC CHIP 0.001MF 5%	50V	D503	8-719-401-31	DIODE MA3047L-TX					
C018	1-164-505-11	CERAMIC CHIP 2.2MF 16V		D504	8-719-400-18	DIODE MA152WK					
C019	1-124-477-11	ELECT 47MF 20%	16V	D510	8-719-105-91	DIODE RD5.6M-B2					
C032	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	<IC>							
C035	1-163-037-11	CERAMIC CHIP 0.022MF 10%	25V	IC001	8-759-072-93	IC SDA30C162					
C036	1-164-005-11	CERAMIC CHIP 0.47MF 25V		*1-540-123-11	SOCKET, IC 68P; IC001						
C037	1-163-117-00	CERAMIC CHIP 100PF 5%	50V	IC003	8-759-160-87	IC M27C512-20B1-AE27					
C501	1-163-020-00	CERAMIC CHIP 0.0082MF 10%	50V	IC501	8-759-513-48	IC TDA2595/V9					
C502	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	IC561	8-752-347-92	IC CXD2018Q					
C503	1-104-825-91	FILM 0.0047MF 5%	50V	IC562	8-759-998-98	IC LM358D					
C504	1-130-831-21	MYLAR 0.56MF 10%	63V	IC563	8-759-081-30	IC MC78L05ACPRP					
C505	1-124-925-11	ELECT 2.2MF 20%	50V	<COIL>							
C506	1-162-568-11	CERAMIC CHIP 0.33MF 10%	16V	L001	1-408-421-00	INDUCTOR	100UH				
C507	1-164-489-11	CERAMIC CHIP 0.22MF 10%	16V	L501	1-410-119-11	INDUCTOR	1MMH				
C508	1-164-232-11	CERAMIC CHIP 0.01MF 10%	50V	L561	1-408-409-00	INDUCTOR	10UH				
C509	1-164-161-11	CERAMIC CHIP 0.0022MF 10%	50V								
C510	1-124-925-11	ELECT 2.2MF 20%	50V								
C511	1-106-375-12	MYLAR 0.022MF 10%	250V								

M C

REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
L562	1-408-409-00	INDUCTOR	10UH		R510	1-216-073-00	METAL GLAZE	10K	5%
L563	1-408-947-00	INDUCTOR	2.2MH		R511	1-216-097-00	METAL GLAZE	100K	5%
		<TRANSISTOR>			R512	1-216-049-00	METAL GLAZE	1K	5%
					R513	1-216-230-00	METAL GLAZE	22K	5%
					R514	1-216-061-00	METAL GLAZE	3.3K	5%
Q002	8-729-216-22	TRANSISTOR	2SA1162-G		R515	1-216-049-00	METAL GLAZE	1K	5%
Q003	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		R516	1-216-039-00	METAL GLAZE	390	5%
Q501	8-729-901-01	TRANSISTOR	DTC144EK		R517	1-216-039-00	METAL GLAZE	390	5%
Q502	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		R518	1-216-075-00	METAL GLAZE	12K	5%
Q503	8-729-901-01	TRANSISTOR	DTC144EK		R519	1-216-033-00	METAL GLAZE	220	5%
Q508	8-729-901-01	TRANSISTOR	DTC144EK		R520	1-216-093-00	METAL GLAZE	68K	5%
Q509	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		R521	1-216-053-00	METAL GLAZE	1.5K	5%
Q564	8-729-216-22	TRANSISTOR	2SA1162-G		R522	1-216-085-00	METAL GLAZE	33K	5%
Q565	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		R523	1-216-065-00	METAL GLAZE	4.7K	5%
Q566	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		R524	1-216-063-00	METAL GLAZE	3.9K	5%
Q567	8-729-901-01	TRANSISTOR	DTC144EK		R525	1-216-093-00	METAL GLAZE	68K	5%
		<RESISTOR>			R526	1-216-073-00	METAL GLAZE	10K	5%
JR540	1-216-295-00	METAL GLAZE	0	5%	R527	1-216-689-11	METAL GLAZE	39K	5%
R001	1-216-025-00	METAL GLAZE	100	5%	R528	1-216-049-00	METAL GLAZE	1K	5%
R002	1-216-025-00	METAL GLAZE	100	5%	R529	1-216-696-11	METAL CHIP	75K	0.50%
R003	1-216-049-00	METAL GLAZE	1K	5%					
R006	1-216-049-00	METAL GLAZE	1K	5%	R531	1-216-085-00	METAL GLAZE	33K	5%
R007	1-216-073-00	METAL GLAZE	10K	5%	R532	1-216-671-11	METAL CHIP	6.8K	0.50%
R008	1-216-049-00	METAL GLAZE	1K	5%	R533	1-216-105-00	METAL GLAZE	220K	5%
R010	1-216-049-00	METAL GLAZE	1K	5%	R535	1-216-057-00	METAL GLAZE	2.2K	5%
R011	1-216-049-00	METAL GLAZE	1K	5%	R536	1-216-057-00	METAL GLAZE	2.2K	5%
R012	1-216-049-00	METAL GLAZE	1K	5%	R538	1-216-025-00	METAL GLAZE	100	5%
R014	1-216-049-00	METAL GLAZE	1K	5%	R539	1-216-657-11	METAL CHIP	1.8K	0.50%
R015	1-216-296-00	METAL GLAZE	0	5%	R541	1-216-049-00	METAL GLAZE	1K	5%
R016	1-216-045-00	METAL GLAZE	680	5%	R542	1-216-025-00	METAL GLAZE	100	5%
R017	1-216-049-00	METAL GLAZE	1K	5%	R544	1-216-085-00	METAL GLAZE	33K	5%
R018	1-216-041-00	METAL GLAZE	470	5%					
R020	1-216-049-00	METAL GLAZE	1K	5%	R545	1-216-033-00	METAL GLAZE	220	5%
R021	1-216-065-00	METAL GLAZE	4.7K	5%	R546	1-216-061-00	METAL GLAZE	3.3K	5%
R025	1-216-049-00	METAL GLAZE	1K	5%	R547	1-216-049-00	METAL GLAZE	1K	5%
R026	1-216-049-00	METAL GLAZE	1K	5%	R551	1-216-049-00	METAL GLAZE	1K	5%
R028	1-216-075-00	METAL GLAZE	12K	5%	R552	1-216-097-00	METAL GLAZE	100K	5%
R030	1-216-049-00	METAL GLAZE	1K	5%	R553	1-216-085-00	METAL GLAZE	33K	5%
R032	1-216-049-00	METAL GLAZE	1K	5%	R559	1-216-049-00	METAL GLAZE	1K	5%
R033	1-216-049-00	METAL GLAZE	1K	5%	R560	1-216-073-00	METAL GLAZE	10K	5%
R034	1-216-057-00	METAL GLAZE	2.2K	5%	R564	1-216-091-00	METAL GLAZE	56K	5%
R035	1-216-057-00	METAL GLAZE	2.2K	5%	R565	1-216-065-00	METAL GLAZE	4.7K	5%
R038	1-216-073-00	METAL GLAZE	10K	5%					
R049	1-216-049-00	METAL GLAZE	1K	5%	R566	1-216-073-00	METAL GLAZE	10K	5%
R050	1-216-073-00	METAL GLAZE	10K	5%	R567	1-216-085-00	METAL GLAZE	33K	5%
R051	1-216-081-00	METAL GLAZE	22K	5%	R568	1-216-109-00	METAL GLAZE	330K	5%
R052	1-216-073-00	METAL GLAZE	10K	5%	R570	1-216-049-00	METAL GLAZE	1K	5%
R053	1-216-065-00	METAL GLAZE	4.7K	5%					
R054	1-216-081-00	METAL GLAZE	22K	5%	RV506	1-241-766-11	RES., ADJ., CERMET	47K	
R055	1-216-081-00	METAL GLAZE	22K	5%	*A-1638-033-A C BOARD, COMPLETE				
R067	1-216-043-00	METAL GLAZE	560	5%	*****				
R068	1-216-043-00	METAL GLAZE	560	5%	*****				
R069	1-216-037-00	METAL GLAZE	330	5%	<CAPACITOR>				
R070	1-216-037-00	METAL GLAZE	330	5%	C701	1-162-114-00	CERAMIC	0.0047MF	
R501	1-216-047-00	METAL GLAZE	820	5%	C703	1-123-946-00	ELECT	4.7MF	20%
R502	1-216-097-00	METAL GLAZE	100K	5%	C705	1-162-116-00	CERAMIC	680PF	10%
R503	1-216-067-00	METAL GLAZE	5.6K	5%	C708	1-163-197-00	CERAMIC CHIP	470PF	10%
R504	1-216-063-00	METAL GLAZE	3.9K	5%	C709	1-163-005-11	CERAMIC CHIP	470PF	10%
R505	1-216-075-00	METAL GLAZE	12K	5%	C710	1-163-005-11	CERAMIC CHIP	470PF	10%
R506	1-216-049-00	METAL GLAZE	1K	5%	C711	1-101-880-00	CERAMIC	47PF	5%
R507	1-216-097-00	METAL GLAZE	100K	5%	C712	1-163-121-00	CERAMIC CHIP	150PF	5%
R509	1-216-036-00	METAL GLAZE	390	5%					

C D1

Les composants identifiés par une trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK	
C713	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	R710	1-215-899-11	METAL OXIDE	15K	5%	2W	F
C714	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	R711	1-202-820-11	SOLID	1.5K	20%	1/2W	F
C716	1-124-122-11	ELECT	100MF	20%	50V	R712	1-215-899-11	METAL OXIDE	15K	5%	2W	F
						R713	1-202-820-11	SOLID	1.5K	20%	1/2W	F
						R714	1-215-899-11	METAL OXIDE	15K	5%	2W	F
		<CONNECTOR>				R715	1-202-820-11	SOLID	1.5K	20%	1/2W	
CN0002*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P					R716	1-247-700-11	CARBON	100	5%	1/4W	F
CN0403*1-564-511-31	PLUG, CONNECTOR 8P					R717	1-249-405-11	CARBON	100	5%	1/4W	F
CN0421*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P					R718	1-247-700-11	CARBON	100	5%	1/4W	F
						R720	1-249-417-11	CARBON	1K	5%	1/4W	F
		<DIODE>				R722	1-247-713-11	CARBON	1K	5%	1/4W	F
D701	8-719-911-19	DIODE	ISS119			R724	1-249-417-11	CARBON	1K	5%	1/4W	F
D702	8-719-911-19	DIODE	ISS119			R725	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
D703	8-719-911-19	DIODE	ISS119			R726	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
D704	8-719-911-19	DIODE	ISS119			R727	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
D705	8-719-911-19	DIODE	ISS119			R728	1-216-037-00	METAL GLAZE	330	5%	1/10W	
D706	8-719-911-19	DIODE	ISS119			R729	1-216-037-00	METAL GLAZE	330	5%	1/10W	
D707	8-719-911-19	DIODE	ISS119			R730	1-216-037-00	METAL GLAZE	330	5%	1/10W	
D708	8-719-911-19	DIODE	ISS119			R731	1-216-017-00	METAL GLAZE	47	5%	1/10W	
D709	8-719-911-19	DIODE	ISS119			R732	1-216-017-00	METAL GLAZE	47	5%	1/10W	
D710	8-719-911-19	DIODE	ISS119			R733	1-216-017-00	METAL GLAZE	47	5%	1/10W	
D713	8-719-908-03	DIODE	GP08D			R734	1-202-549-00	SOLID	100	20%	1/2W	
						R735	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
						R738	1-216-025-00	METAL GLAZE	100	5%	1/10W	
						R739	1-216-025-00	METAL GLAZE	100	5%	1/10W	
		<JACK>				R740	1-216-025-00	METAL GLAZE	100	5%	1/10W	
J701	△ 1-540-223-11	SOCKET, PICTURE TUBE				R741	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
						R742	1-216-295-00	METAL GLAZE	0	5%	1/10W	
		<COIL>				R743	1-249-434-11	CARBON	27K	5%	1/4W	
L701	1-410-667-31	INDUCTOR	22UH			R747	1-216-489-11	METAL OXIDE	27K	5%	3W	F
L703	1-408-609-41	INDUCTOR	33UH			R749	1-216-490-11	METAL OXIDE	39K	5%	3W	F
L705	1-408-609-41	INDUCTOR	33UH			R751	1-215-926-00	METAL OXIDE	33K	5%	3W	F
L707	1-408-609-41	INDUCTOR	33UH			R753	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
						R755	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
						R756	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
		<TRANSISTOR>				R757	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
Q701	8-729-906-70	TRANSISTOR	BF871			R758	1-249-419-11	CARBON	1.5K	5%	1/4W	
Q702	8-729-906-70	TRANSISTOR	BF871			R759	1-249-419-11	CARBON	1.5K	5%	1/4W	
Q703	8-729-906-70	TRANSISTOR	BF871			R760	1-249-419-11	CARBON	1.5K	5%	1/4W	
Q705	8-729-906-70	TRANSISTOR	BF871									
Q706	8-729-906-70	TRANSISTOR	BF871									
Q707	8-729-200-17	TRANSISTOR	2SA1091-0									
Q708	8-729-200-17	TRANSISTOR	2SA1091-0									
Q709	8-729-200-17	TRANSISTOR	2SA1091-0									
Q710	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R									
Q711	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R									
Q712	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R									
Q713	8-729-216-22	TRANSISTOR	2SA1162-G									
Q714	8-729-255-12	TRANSISTOR	2SC2551-0									
		<RESISTOR>										
JR701	1-216-296-00	METAL GLAZE	0	5%	1/8W							
JR703	1-216-296-00	METAL GLAZE	0	5%	1/8W							
R701	1-202-848-00	SOLID	680K	10%	1/2W	C1601	1-124-903-11	ELECT	1MF	20%	50V	
R702	1-202-838-00	SOLID	100K	20%	1/2W	C1602	1-136-177-00	FILM	1MF	5%	50V	
R703	1-202-815-11	SOLID	47K	20%	1/2W	C1603	1-130-772-00	FILM	0.22MF	5%	63V	
						C1605	1-126-320-11	ELECT	10MF	20%	16V	
						C1606	1-124-910-11	ELECT	47MF	20%	50V	
						C1607	1-124-902-00	ELECT	0.47MF	20%	50V	
						C1608	1-102-112-00	CERAMIC	330PF	10%	50V	
						C1610	1-136-103-00	FILM	0.1MF	5%	200V	
						C1611	1-124-903-11	ELECT	1MF	20%	50V	
						C1614	1-137-371-11	FILM	0.015MF	5%	50V	
		<CAPACITOR>				C1615	1-124-903-11	ELECT	1MF	20%	50V	

D1

D1 D2

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
JR2	1-216-296-00	METAL GLAZE	0 5% 1/8W	R1685	1-249-441-11	CARBON	100K 5% 1/4W
R1601	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R1686	1-249-441-11	CARBON	100K 5% 1/4W
R1602	1-249-433-11	CARBON	22K 5% 1/4W	R1687	1-249-441-11	CARBON	100K 5% 1/4W
R1603	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1801	1-249-409-11	CARBON	220 5% 1/4W
R1604	1-249-429-11	CARBON	10K 5% 1/4W	R1802	1-249-409-11	CARBON	220 5% 1/4W
R1605	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1804	1-247-891-00	CARBON	330K 5% 1/4W
R1606	1-249-425-11	CARBON	4.7K 5% 1/4W	R1806	1-216-103-00	METAL GLAZE	180K 5% 1/10W
R1607	1-249-436-11	CARBON	39K 5% 1/4W	R1807	1-247-891-00	CARBON	330K 5% 1/4W
R1608	1-216-685-11	METAL CHIP	27K 0.50% 1/10W	R1808	1-215-461-00	METAL	47K 1% 1/4W
R1609	1-216-693-11	METAL CHIP	56K 0.50% 1/10W	R1809	1-249-423-11	CARBON	3.3K 5% 1/4W
R1610	1-216-687-11	METAL CHIP	33K 0.50% 1/10W	R1810	1-249-413-11	CARBON	470 5% 1/4W
R1611	1-218-758-11	METAL CHIP	180K 0.50% 1/10W	R1811	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R1612	1-249-425-11	CARBON	4.7K 5% 1/4W	R1812	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R1613	1-249-425-11	CARBON	4.7K 5% 1/4W	R1813	1-249-417-11	CARBON	1K 5% 1/4W
R1615	1-249-424-11	CARBON	3.9K 5% 1/4W	R1815	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R1616	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1816	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R1617	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1817	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
R1619	1-216-085-00	METAL GLAZE	33K 5% 1/10W	R1818	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R1620	1-249-419-11	CARBON	1.5K 5% 1/4W	R1819	1-216-079-00	METAL GLAZE	18K 5% 1/10W
R1621	1-215-876-00	METAL OXIDE	15K 5% 1W F	R1820	1-249-417-11	CARBON	1K 5% 1/4W
R1622	1-215-870-11	METAL OXIDE	1.5K 5% 1W F	R1821	1-216-379-11	METAL OXIDE	6.8 5% 2W F
R1624	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W	R1822	1-249-423-11	CARBON	3.3K 5% 1/4W
R1625	1-249-430-11	CARBON	12K 5% 1/4W	R1824	1-249-417-11	CARBON	1K 5% 1/4W F
R1626	1-249-409-11	CARBON	220 5% 1/4W	R1825	1-215-857-11	METAL OXIDE	10 5% 1W F
R1627	1-249-415-11	CARBON	680 5% 1/4W	R1826	1-249-404-00	CARBON	82 5% 1/4W F
R1628	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1827	1-215-875-11	METAL OXIDE	10K 5% 1W F
R1629	1-249-429-11	CARBON	10K 5% 1/4W	R1828	1-249-441-11	CARBON	100K 5% 1/4W
R1630	1-249-433-11	CARBON	22K 5% 1/4W	R1829	1-249-414-11	CARBON	560 5% 1/4W
R1631	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1830	1-249-411-11	CARBON	330 5% 1/4W
R1633	1-249-421-11	CARBON	2.2K 5% 1/4W	R1831	1-249-426-11	CARBON	5.6K 5% 1/4W F
R1634	1-216-093-00	METAL GLAZE	68K 5% 1/10W	R1832	1-215-864-00	METAL OXIDE	150 5% 1W F
R1635	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1833	1-249-421-11	CARBON	2.2K 5% 1/4W
R1636	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R1834	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R1637	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W	R1835	1-249-393-11	CARBON	10 5% 1/4W
R1638	1-249-405-11	CARBON	100 5% 1/4W	R1836	1-249-435-11	CARBON	33K 5% 1/4W
R1639	1-249-405-11	CARBON	100 5% 1/4W F	R1837	1-249-435-11	CARBON	33K 5% 1/4W
R1640	1-249-405-11	CARBON	100 5% 1/4W F	R1838	1-216-379-11	METAL OXIDE	6.8 5% 2W F
R1641	1-249-405-11	CARBON	100 5% 1/4W	R1839	1-249-410-11	CARBON	270 5% 1/4W
R1644	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1840	1-249-429-11	CARBON	10K 5% 1/4W
R1645	1-216-113-00	METAL GLAZE	470K 5% 1/10W	R1841	1-249-437-11	CARBON	47K 5% 1/4W
R1646	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1842	1-249-429-11	CARBON	10K 5% 1/4W
R1647	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W	R1843	1-249-421-11	CARBON	2.2K 5% 1/4W
R1648	1-249-435-11	CARBON	33K 5% 1/4W	R1846	1-249-429-11	CARBON	10K 5% 1/4W
R1650	1-249-425-11	CARBON	4.7K 5% 1/4W	R1847	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R1652	1-216-025-00	METAL GLAZE	100 5% 1/10W	R1848	1-249-429-11	CARBON	10K 5% 1/4W
R1653	1-216-107-00	METAL GLAZE	270K 5% 1/10W	R1849	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R1654	1-247-889-00	CARBON	270K 5% 1/4W	R1850	1-249-415-11	CARBON	680 5% 1/4W
R1655	1-215-876-00	METAL OXIDE	15K 5% 1W F	*****	*****	*****	*****
R1656	1-249-413-11	CARBON	470 5% 1/4W F	*A-1640-106-A	D2 BOARD, COMPLETE		
R1657	1-249-393-11	CARBON	10 5% 1/4W F	*****	*****	*****	*****
R1658	1-249-437-11	CARBON	47K 5% 1/4W				
R1659	1-216-295-00	METAL GLAZE	0 5% 1/10W	C1851	1-124-910-11	ELECT	47MF 20% 50V
R1660	1-216-089-00	METAL GLAZE	47K 5% 1/10W	C1853	1-124-907-11	ELECT	10MF 20% 50V
R1661	1-216-073-00	METAL GLAZE	10K 5% 1/10W	C1854	1-124-910-11	ELECT	47MF 20% 50V
R1662	1-216-097-00	METAL GLAZE	100K 5% 1/10W	C1855	1-137-047-11	FILM	0.01MF 10% 400V
R1664	1-249-412-11	CARBON	390 5% 1/4W F	C1858	1-163-275-11	CERAMIC CHIP	0.001MF 5% 50V
R1665	1-218-078-51	METAL OXIDE	2.2K 5% 2W				
R1666	1-218-078-51	METAL OXIDE	2.2K 5% 2W				
R1671	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
R1680	1-249-417-11	CARBON	1K 5% 1/4W				
R1681	1-249-429-11	CARBON	10K 5% 1/4W	C1859	1-163-275-11	CERAMIC CHIP	0.001MF 5% 50V
R1682	1-249-433-11	CARBON	22K 5% 1/4W	C1860	1-137-104-11	FILM	0.033MF 10% 250V
R1683	1-249-411-11	CARBON	330 5% 1/4W	C1861	1-137-104-11	FILM	0.033MF 10% 250V
R1684	1-249-435-11	CARBON	33K 5% 1/4W	C1862	1-124-657-00	ELECT	10MF 20% 50V

D2 D

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK						
C1863	1-136-104-00	FILM	0.16MF	5%	200V	R1885	1-216-198-00	METAL GLAZE	1K	5%	1/8W						
C1867	1-124-478-11	ELECT	100MF	20%	25V	R1886	1-216-295-00	METAL GLAZE	0	5%	1/10W						
C1891	1-164-346-11	CERAMIC CHIP	1MF		16V	R1889	1-260-098-11	CARBON	820	5%	1/2W						
<CONNECTOR>																	
CN1823*1-573-299-11 CONNECTOR, BOARD TO BOARD 10P																	
<DIODE>																	
D1851	8-719-110-31	DIODE	RD12ES-B2			R1893	1-249-387-11	CARBON	3.3	5%	1/4W						
D1852	8-719-110-31	DIODE	RD12ES-B2			R1894	1-249-429-11	CARBON	10K	5%	1/4W						
D1856	8-719-911-19	DIODE	ISS119			R1895	1-249-429-11	CARBON	10K	5%	1/4W						
D1867	8-719-987-87	DIODE	ERA85-009			R1896	1-249-427-11	CARBON	6.8K	5%	1/4W						
D1868	8-719-987-87	DIODE	ERA85-009			R1898	1-249-411-11	CARBON	330	5%	1/4W						
D1882	8-719-109-89	DIODE	RD5.6ES-B2			R1899	1-249-411-11	CARBON	330	5%	1/4W						
D1883	8-719-109-89	DIODE	RD5.6ES-B2			<VARIABLE RESISTOR>											
<IC>																	
IC1851	8-759-081-30	IC	MC78L05ACPRP			RV1851	1-241-765-11	RES, ADJ, CERMET	22K								
IC1852	8-759-135-80	IC	UPC358C			RV1853	1-241-761-11	RES, ADJ, CERMET	1K								
IC1853	8-759-902-21	IC	SN74LS221N			<TRANSFORMER>											
<COIL>																	
L1852	1-459-390-00	COIL (WITH CORE)				T1851	1-423-622-11	TRANSFORMER, FERRITE									
<IC LINK>																	
PS1851Δ 1-532-727-91 LINK, IC 0.25A																	
<TRANSISTOR>																	
Q1851	8-729-119-78	TRANSISTOR	2SC2785-HFE			C601	1-130-202-00	FILM	0.022MF	10%	400V						
Q1852	8-729-173-38	TRANSISTOR	2SA733-K			C603	Δ 1-164-246-61	CERAMIC	0.0022MF	20%	400V						
Q1853	8-729-119-78	TRANSISTOR	2SC2785-HFE			C605	1-124-910-11	ELECT	47MF	20%	50V						
Q1854	8-729-173-38	TRANSISTOR	2SA733-K			C608	1-124-903-11	ELECT	1MF	20%	50V						
Q1855	8-729-119-78	TRANSISTOR	2SC2785-HFE			C611	1-102-002-00	CERAMIC	680PF	10%	500V						
Q1856	8-729-208-39	TRANSISTOR	2SA1306A-Y			C612	1-130-481-00	FILM	0.0068MF	5%	50V						
Q1857	8-729-122-03	TRANSISTOR	2SA1220A-P			C613	1-129-722-00	FILM	0.047MF	10%	630V						
Q1858	8-729-920-92	TRANSISTOR	2SD2096-EF			C614	1-102-030-00	CERAMIC	330PF	10%	500V						
Q1859	8-729-173-38	TRANSISTOR	2SA733-K			C615	1-124-962-11	ELECT	2200MF	20%	25V						
Q1860	8-729-119-78	TRANSISTOR	2SC2785-HFE			C616	1-162-115-00	CERAMIC	330PF	10%	1KV						
Q1861	8-729-208-72	TRANSISTOR	2SC3298B-Y			C617	1-162-116-00	CERAMIC	680PF	10%	2KV						
<RESISTOR>																	
R1851	1-260-098-11	CARBON	820	5%	1/2W	C618	1-162-134-11	CERAMIC	470PF	10%	2KV						
R1852	1-247-895-00	CARBON	470K	5%	1/4W	C619	1-102-030-00	CERAMIC	330PF	10%	500V						
R1853	1-215-465-00	METAL	68K	1%	1/4W	C620	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V						
R1854	1-249-429-11	CARBON	10K	5%	1/4W	C621	1-124-347-00	ELECT	100MF	20%	160V						
R1855	1-247-895-00	CARBON	470K	5%	1/4W	C622	1-128-320-11	ELECT	2200MF	20%	16V						
R1860	1-249-408-11	CARBON	180	5%	1/4W	C623	1-102-030-00	CERAMIC	330PF	10%	500V						
R1861	1-249-429-11	CARBON	10K	5%	1/4W	C624	1-126-800-51	ELECT	2200MF	20%	35V						
R1862	1-249-418-11	CARBON	1.2K	5%	1/4W	C625	1-126-800-51	ELECT	2200MF	20%	35V						
R1863	1-215-475-00	METAL	180K	1%	1/4W	C627	1-136-553-11	FILM	0.0015MF	10%	400V						
R1873	1-249-387-11	CARBON	3.3	5%	1/4W F	C628	1-124-910-11	ELECT	47MF	20%	50V						
R1875	1-215-445-00	METAL	10K	1%	1/4W	C629	1-124-907-11	ELECT	10MF	20%	50V						
R1878	1-260-096-11	CARBON	560	5%	1/2W	C631	1-163-075-00	CERAMIC CHIP	0.047MF	10%	25V						
R1879	1-249-394-11	CARBON	12	5%	1/4W F	C632	1-137-372-11	FILM	0.022MF	5%	50V						
R1881	1-260-096-11	CARBON	560	5%	1/2W	C633	1-163-078-11	CERAMIC CHIP	0.033MF	10%	25V						
R1882	1-215-867-00	METAL OXIDE	470	5%	1W F	C636	1-130-777-00	FILM	0.1MF	5%	63V						
						C640	1-124-916-11	ELECT	22MF	20%	50V						
						C801	1-137-116-11	FILM	1MF	5%	200V						
						C803	1-164-695-11	CERAMIC CHIP	0.0022MF	5%	50V						
						C804	1-106-383-00	MYLAR	0.047MF	10%	100V						
						C805	1-124-902-00	ELECT	0.47MF	20%	50V						
						C806	1-124-907-11	ELECT	10MF	20%	50V						

D

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C807	1-136-553-11	FILM	0.0015MF	10%	400V		<CONNECTOR>
C808	1-162-114-00	CERAMIC	0.0047MF	2Kv			
C809	1-124-808-51	ELECT	10MF	20%	200V		
C810	1-163-001-11	CERAMIC CHIP	220PF	10%	50V		
C812	1-162-318-11	CERAMIC	0.001MF	10%	500V		
C813	1-108-704-11	MYLAR	0.1MF	10%	200V		
C815	1-162-117-00	CERAMIC	100PF	10%	500V		
C816	1-102-244-00	CERAMIC	220PF	10%	500V		
C819	1-126-103-11	ELECT	470MF	20%	16V		
C821 A	1-137-347-11	FILM	0.022MF	3%	2KV		
C822 A	1-162-116-91	CERAMIC	680PF	10%	2KV		
C823	1-124-902-00	ELECT	0.47MF	20%	50V		
C824	1-137-366-11	FILM	0.0022MF	5%	50V		
C825 A	1-162-116-91	CERAMIC	680PF	10%	2KV		
C826 A	1-137-515-61	FILM	0.056MF	3%	400V		
C827	1-130-777-00	FILM	0.1MF	5%	63V		
C828	1-136-557-11	FILM	0.0033MF	10%	400V		
C830	1-136-105-00	FILM	0.33MF	5%	200V		
C831	1-123-932-00	ELECT	4.7MF	20%	160V		
C832	1-124-910-11	ELECT	47MF	20%	50V		<DIODE>
C833	1-137-516-11	FILM	1.2MF	5%	200V	D602	8-719-936-84 DIODE RGP10GPKG3
C834	1-137-114-11	FILM	0.68MF	5%	200V	D606	8-719-936-84 DIODE RGP10GPKG3
C835	1-124-480-11	ELECT	470MF	20%	25V	D608	8-719-300-33 DIODE RU-3AM
C836	1-102-228-00	CERAMIC	470PF	10%	500V	D609	8-719-029-04 DIODE D5L60
C837	1-129-702-00	FILM	0.001MF	10%	400V	D610	8-719-970-39 DIODE ESAC92M-02
C838	1-108-704-11	MYLAR	0.1MF	10%	200V	D611	8-719-029-04 DIODE D5L60
C839	1-123-950-00	ELECT	47MF	20%	250V	D612	8-719-510-09 DIODE D10SC6M
C840	1-124-480-11	ELECT	470MF	20%	25V	D613	8-719-920-68 DIODE ESAB92-02
C841	1-102-228-00	CERAMIC	470PF	10%	500V	D614	8-719-920-68 DIODE ESAB92-02
C842	1-104-722-91	FILM	0.068MF	10%	250V	D616	8-719-110-31 DIODE RD12ES-B2
C846	1-123-024-21	ELECT	33MF	160V		D619	8-719-400-18 DIODE MA152WK
C851	1-137-364-91	FILM	0.001MF	5%	50V	D620	8-719-911-19 DIODE 1S119
C852	1-164-299-11	CERAMIC CHIP	0.22MF	10%	25V	D624	8-719-312-40 DIODE R2K
C853	1-124-910-11	ELECT	47MF	20%	50V	D801	8-719-018-82 DIODE RGP02-20EL-6394
C854 A	1-162-115-91	CERAMIC	330PF	10%	2KV	D802	8-719-936-84 DIODE RGP10GPKG3
C857	1-124-902-00	ELECT	0.47MF	20%	50V	D804	8-719-400-18 DIODE MA152WK
C861	1-130-777-00	FILM	0.1MF	5%	63V	D808	8-719-109-88 DIODE RD5.6ES-B1
C863	1-106-383-00	MYLAR	0.047MF	10%	100V	D809	8-719-110-03 DIODE RD7.5ES-B2
C866	1-137-364-91	FILM	0.001MF	5%	50V	D811	8-719-300-33 DIODE RU-3AM
C869	1-130-777-00	FILM	0.1MF	5%	63V	D812	8-719-908-03 DIODE GP08D
C870	1-137-364-91	FILM	0.001MF	5%	50V	D813	8-719-908-03 DIODE GP08D
C871	1-130-651-00	FILM	0.001MF	2%	100V	D814	8-719-028-29 DIODE RU30ALFS1
C872	1-124-907-11	ELECT	10MF	20%	50V	D815	8-719-936-84 DIODE RGP10GPKG3
C873	1-137-364-91	FILM	0.001MF	5%	50V	D816	8-719-979-85 DIODE EGP20G
C875	1-102-038-00	CERAMIC	0.001MF	500V		D818	8-719-109-93 DIODE RD6.2ES-B2
C877	1-124-902-00	ELECT	0.47MF	20%	50V	D821	8-719-400-18 DIODE MA152WK
C878	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	D822	8-719-982-20 DIODE MTZJ-30B
C879	1-102-228-00	CERAMIC	470PF	10%	500V	D824	8-719-976-64 DIODE RGP02-17
C1501	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	D825	8-719-400-18 DIODE MA152WK
C1502	1-124-903-11	ELECT	1MF	20%	50V	D826	8-719-400-18 DIODE MA152WK
C1503	1-163-141-00	CERAMIC CHIP	0.001MF	5%	50V	D827	8-719-982-96 DIODE MTZJ-T-77-2.2A
C1504	1-124-480-11	ELECT	470MF	20%	25V	D828	8-719-911-19 DIODE 1S119
C1505	1-124-911-11	ELECT	220MF	20%	50V	D830	8-719-400-18 DIODE MA152WK
C1506	1-136-202-11	FILM	0.33MF	5%	63V	D831	8-719-400-18 DIODE MA152WK
C1507	1-106-224-00	MYLAR	0.15MF	10%	100V	D832	8-719-400-18 DIODE MA152WK
C1508	1-124-480-11	ELECT	470MF	20%	25V	D833	8-719-400-18 DIODE MA152WK
C1509	1-124-767-00	ELECT	2.2MF	20%	50V	D1501	8-719-400-18 DIODE MA152WK
C1511	1-124-907-11	ELECT	10MF	20%	50V	D1503	8-719-908-03 DIODE GP08D
C1512	1-124-006-11	ELECT	10MF	20%	25V	D1504	8-719-982-03 DIODE MTZJ-3.6A
C1513	1-163-113-00	CERAMIC CHIP	68PF	5%	50V		<IC>
C1514	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	IC601	8-759-073-29 IC TDA4605-3
C1515	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	IC602	8-759-908-15 IC TL431CLP-Z20
						IC603 A	8-749-923-44 IC SFH617G-1

SONY SERVICE MANUAL

AE-2 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-S3411A	RM-832	Italian	SCC-F18K-A
KV-S3411B	RM-832	French	SCC-F32K-A
KV-S3411D	RM-832	AEP	SCC-F26K-A

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-S3413E	RM-832	Spanish	SCC-F33K-A
KV-S3412U	RM-832	UK	SCC-F25J-A

CORRECTION-1

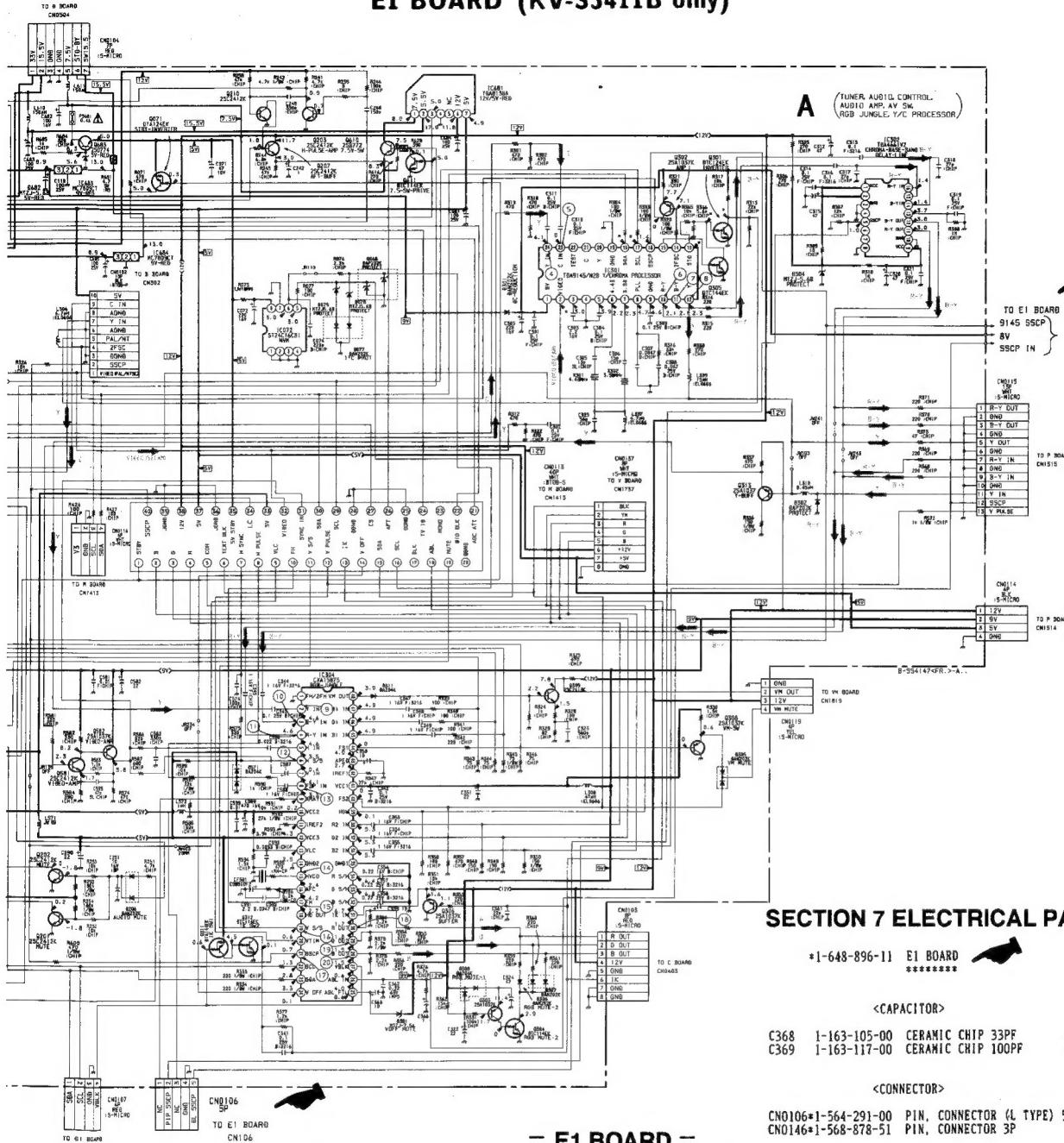
SUBJECT: CORRECTED CIRCUIT DIAGRAM

File this correction with the service manual.



SECTION 5 DIAGRAMS
5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS
E1 BOARD (KV-S3411B only)

— A BOARD —

A (TUNER, AUDIO CONTROL,
AUDIO AMP, AV 2W
RGB JUNGL, Y/C PROCESSOR)**SECTION 7 ELECTRICAL PARTS LIST**

*1-648-896-11 E1 BOARD *****

<CAPACITOR>

C368	1-163-105-00	CERAMIC CHIP 33PF	5%	50V
C369	1-163-117-00	CERAMIC CHIP 100PF	5%	50V

<CONNECTOR>

CN0106*1-564-291-00	PIN, CONNECTOR (L TYPE) 5P
CN0146*1-568-878-51	PIN, CONNECTOR 3P

<DIODE>

D312	8-719-914-43	DIODE DAN202K
D313	8-719-914-43	DIODE DAN202K
D314	8-719-914-43	DIODE DAN202K

<TRANSISTOR>

Q314	8-729-920-74	TRANSISTOR 2SC2412X-QR
Q315	8-729-920-74	TRANSISTOR 2SC2412X-QR

<RESISTOR>

JR301	1-216-295-91	METAL GLAZE 0	5%	1/10W
JR303	1-216-295-91	METAL GLAZE 0	5%	1/10W
JR304	1-216-295-91	METAL GLAZE 0	5%	1/10W
R385	1-216-081-00	METAL GLAZE 22K	5%	1/10W
R386	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R387	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W
R388	1-216-073-00	METAL GLAZE 10K	5%	1/10W
R389	1-216-071-00	METAL GLAZE 8.2K	5%	1/10W
R390	1-216-083-00	METAL GLAZE 27K	5%	1/10W
R392	1-216-063-00	METAL GLAZE 3.9K	5%	1/10W
R393	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W

English

93JE0270-1

Printed in Japan

© 1993. 10

The components identified by shading and mark **▲** are critical for safety.
Replace only with part number specified.

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
IC801	8-759-987-16	IC LM393P		JR005	1-216-295-00	METAL GLAZE	0 5% 1/10W
IC802	8-759-987-16	IC LM393P		JR006	1-216-295-00	METAL GLAZE	0 5% 1/10W
IC803	8-759-081-31	IC MC78L12ACPRP		JR500	1-216-296-00	METAL GLAZE	0 5% 1/8W
IC1501	8-759-506-46	IC TDA8179S		JR501	1-216-296-00	METAL GLAZE	0 5% 1/8W
<COIL>				JR502	1-216-296-00	METAL GLAZE	0 5% 1/8W
L602	1-410-397-21	FERRITE BEAD INDUCTOR		JR503	1-216-296-00	METAL GLAZE	0 5% 1/8W
L603	1-410-396-41	FERRITE BEAD INDUCTOR		JR504	1-216-296-00	METAL GLAZE	0 5% 1/8W
L604	1-410-396-41	FERRITE BEAD INDUCTOR		JR505	1-216-296-00	METAL GLAZE	0 5% 1/8W
L605	1-459-442-00	COIL (WITH CORE)		JR506	1-216-296-00	METAL GLAZE	0 5% 1/8W
L606	1-459-442-00	COIL (WITH CORE)		JR507	1-216-296-00	METAL GLAZE	0 5% 1/8W
L610	1-410-397-21	FERRITE BEAD INDUCTOR		JR508	1-216-296-00	METAL GLAZE	0 5% 1/8W
L622	1-412-533-21	INDUCTOR 47UH		JR509	1-216-296-00	METAL GLAZE	0 5% 1/8W
L623	1-412-533-21	INDUCTOR 47UH		JR510	1-216-296-00	METAL GLAZE	0 5% 1/8W
L802	1-408-947-00	INDUCTOR 2.2MMH		JR511	1-216-296-00	METAL GLAZE	0 5% 1/8W
L803	1-420-872-00	COIL, AIR CORE		R601	1-216-353-00	METAL OXIDE	2.2 5% 1W F
L804	1-410-396-41	FERRITE BEAD INDUCTOR		R602	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
L807	1-459-483-00	COIL (WITH CORE)		R603	1-215-901-00	METAL OXIDE	33K 5% 2W F
J08	1-421-541-00	COIL, CHOKE 1000UH		R604	1-260-200-11	CARBON	240K 5% 1/2W
L809	1-459-104-00	COIL, WITH CORE		R605	1-216-313-00	METAL GLAZE	8.2 5% 1/10W
L810	1-460-197-21	COIL, FERRITE (PMC)		R606	1-216-033-00	METAL GLAZE	220 5% 1/10W
L811	1-412-519-11	INDUCTOR 3.3UH		R607	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
L812	1-412-531-31	INDUCTOR 33UH		R608	1-215-928-11	METAL OXIDE	68K 5% 3W F
L813	1-412-519-11	INDUCTOR 3.3UH		R609	1-216-005-00	METAL GLAZE	15 5% 1/10W
L817	1-423-374-11	TRANSFORMER, LINEARITY (HLT)		R610	1-247-881-00	CARBON	120K 5% 1/4W
L1501	1-412-525-21	INDUCTOR 10UH		R611	1-249-405-11	CARBON	100 5% 1/4W
L1502	1-412-525-21	INDUCTOR 10UH		R612	1-247-894-11	CARBON	430K 5% 1/4W
L1503	1-412-525-21	INDUCTOR 10UH		R613	1-216-260-00	METAL GLAZE	390K 5% 1/8W
<IC LINK>				R614	1-216-488-11	METAL OXIDE	18K 5% 3W F
<IC LINK>				R615	1-216-488-11	METAL OXIDE	18K 5% 3W F
<IC LINK>				R617	1-216-033-00	METAL GLAZE	220 5% 1/10W
<IC LINK>				R618	1-216-449-11	METAL OXIDE	56 5% 2W F
PS601▲	1-532-686-91	LINK, IC 2.7A		R620	1-216-045-00	METAL GLAZE	680 5% 1/10W
PS602▲	1-532-686-91	LINK, IC 2.7A		R621	1-216-659-11	METAL CHIP	2.2K 0.50% 1/10W
PS603▲	1-532-686-91	LINK, IC 2.7A		R622	1-216-041-00	METAL GLAZE	470 5% 1/10W
PS604▲	1-532-686-91	LINK, IC 2.7A		R623	1-216-073-00	METAL GLAZE	10K 5% 1/10W
<TRANSISTOR>				R625	1-216-449-11	METAL OXIDE	56 5% 2W F
Q601	8-729-016-14	TRANSISTOR BUZ91A-E3155		R626	1-216-635-11	METAL CHIP	220 0.50% 1/10W
Q602	8-729-177-22	TRANSISTOR 2SB772-Q		R627	1-249-398-11	CARBON	27 5% 1/4W F
Q603	8-729-900-53	TRANSISTOR DTC114EK		R629	1-215-460-00	METAL	43K 1% 1/4W
Q611	8-729-119-78	TRANSISTOR 2SC2785-HFE		R630	1-260-100-11	CARBON	1.2K 5% 1/2W
Q612	8-729-903-29	TRANSISTOR DTA144TK		R631	1-216-397-11	METAL OXIDE	4.7 5% 3W F
Q613	8-729-216-22	TRANSISTOR 2SA1162-G		R633	1-249-415-11	CARBON	680 5% 1/4W
Q801	8-729-016-32	TRANSISTOR 2SC4927-01		R634	1-215-477-00	METAL	220K 1% 1/4W
Q802	8-729-140-97	TRANSISTOR 2SB734-34		R635	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q804	8-729-216-22	TRANSISTOR 2SA1162-G		R636	1-216-453-00	METAL OXIDE	270 5% 2W F
Q805	8-729-216-22	TRANSISTOR 2SA1162-G		R637	1-216-113-00	METAL GLAZE	470K 5% 1/10W
Q806	8-729-019-71	TRANSISTOR 2SK1916-53-F50		R638	1-216-073-00	METAL GLAZE	10K 5% 1/10W
Q807	8-729-119-80	TRANSISTOR 2SC2688-LK		R639	1-216-089-00	METAL GLAZE	47K 5% 1/10W
Q812	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R640	1-207-905-00	WIREWOUND	0.27 10% 2W F
Q813	8-729-140-96	TRANSISTOR 2SD774-34		R645	1-214-775-00	METAL	82K 1% 1/4W
Q818	8-729-216-22	TRANSISTOR 2SA1162-G		R646	1-216-097-00	METAL GLAZE	100K 5% 1/10W
Q1501	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R		R647	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W
Q1502	8-729-901-01	TRANSISTOR DTC144EK		R651	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
Q1503	8-729-216-22	TRANSISTOR 2SA1162-G		R801	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
Q1504	8-729-901-01	TRANSISTOR DTC144EK		R802	1-216-295-00	METAL GLAZE	0 5% 1/10W
<RESISTOR>				R804	1-217-778-11	FUSIBLE	1K 5% 1W F
JR001	1-216-295-00	METAL GLAZE 0 5% 1/10W		R805	1-216-679-11	METAL CHIP	15K 0.50% 1/10W
JR002	1-216-295-00	METAL GLAZE 0 5% 1/10W		R806	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
JR003	1-216-295-00	METAL GLAZE 0 5% 1/10W		R807	1-216-037-00	METAL GLAZE	330 5% 1/10W
JR004	1-216-295-00	METAL GLAZE 0 5% 1/10W		R808	1-216-085-00	METAL GLAZE	33K 5% 1/10W
				R809	1-216-097-00	METAL GLAZE	100K 5% 1/10W
				R811	1-216-033-00	METAL GLAZE	220 5% 1/10W
				R812	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W

D

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **▲** are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R813	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R1550	1-216-105-00	METAL GLAZE	220K 5% 1/10W
R814	1-216-091-00	METAL GLAZE	56K 5% 1/10W	R1551	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R815	1-216-081-00	METAL GLAZE	22K 5% 1/10W	R1552	1-216-105-00	METAL GLAZE	220K 5% 1/10W
R819	1-247-755-11	CARBON	1.8K 5% 1/2W F				<VARIABLE RESISTOR>
R820	1-216-097-00	METAL GLAZE	100K 5% 1/10W	RV601	1-241-628-11	RES, ADJ, CARBON 2.2K	
R821	1-216-481-11	METAL OXIDE	1.2K 5% 3W F				<TRANSFORMER>
R822	1-216-481-11	METAL OXIDE	1.2K 5% 3W F	T601	▲ 1-697-001-11	S.R.T (SNT89)	
R823	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	T801	▲ 1-453-126-11	TRANSFORMER ASSY, FLYBACK (NX-3000A3)	
R824	1-216-673-11	METAL CHIP	8.2K 0.50% 1/10W	T803	1-437-090-00	HDT	
R825	1-216-342-11	METAL OXIDE	0.27 5% 1W F	T804	1-424-584-11	TRANSFORMER, DYNAMIC FOCUS	
R826	1-216-166-00	METAL GLAZE	47 5% 1/8W				*****
R828	1-216-121-00	METAL GLAZE	1M 5% 1/10W				MISCELLANEOUS
R829	1-249-429-11	CARBON	10K 5% 1/4W F				*****
R830	1-216-687-11	METAL CHIP	33K 0.50% 1/10W				▲ 1-406-701-11 COIL, DEMAGNETIZATION
R832	1-216-089-00	METAL GLAZE	47K 5% 1/10W				▲ 1-406-702-11 COIL, DEMAGNETIZATION
R833	1-216-105-00	METAL GLAZE	220K 5% 1/10W				▲ 1-451-393-11 DEFLECTION YOKE (Y34EXA)
R834	1-216-101-00	METAL GLAZE	150K 5% 1/10W				1-452-032-00 MAGNET, DISK; 10MM Ø
R835	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				1-452-094-00 MAGNET, ROTATABLE DISK; 15MM Ø
R836	1-216-242-00	METAL GLAZE	68K 5% 1/8W				▲ 1-452-616-13 NECK ASSY, PICTURE TUBE (NA323)
R837	1-216-695-11	METAL CHIP	68K 0.50% 1/10W				1-504-121-21 SPEAKER (SQUAWKER) (5CM)
R838	1-216-097-00	METAL GLAZE	100K 5% 1/10W				1-504-145-11 SPEAKER (12CM)
R839	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W				▲ 1-590-501-11 CORD, POWER (WITH NOISE FILTER) (KV-S3411A, S3411B, S3411D, S3413E)
R841	1-249-397-11	CARBON	22 5% 1/4W F				▲ 1-590-762-11 CORD, POWER (WITH PLUG) (KV-S3412U)
R842	1-216-454-11	METAL OXIDE	390 5% 2W F				V901 ▲ 8-733-731-05 PICTURE TUBE (M81KVA10X)
R846	1-216-671-11	METAL CHIP	6.8K 0.50% 1/10W				*****
R847	1-216-097-00	METAL GLAZE	100K 5% 1/10W				ACCESSORIES AND PACKING MATERIALS
R848	1-215-885-00	METAL OXIDE	68 5% 2W F				*****
R849	1-215-881-11	METAL OXIDE	15 5% 2W F				4-202-091-41 MANUAL, INSTRUCTION (KV-S3411A)
R851	1-247-743-11	CARBON	220 5% 1/2W F				4-202-091-51 MANUAL, INSTRUCTION (KV-S3411B)
R852	1-249-389-11	CARBON	4.7 5% 1/4W F				4-202-091-11 MANUAL, INSTRUCTION (KV-S3411D)
R853	1-249-443-11	CARBON	0.47 5% 1/4W F				4-202-091-61 MANUAL, INSTRUCTION (KV-S3412U)
R854	1-249-443-11	CARBON	0.47 5% 1/4W F				4-202-091-71 MANUAL, INSTRUCTION (KV-S3413E)
R855	1-202-826-00	SOLID	4.7K 20% 1/2W				4-202-091-82 MANUAL, INSTRUCTION (KV-S3413E)
R858	1-249-423-11	CARBON	3.3K 5% 1/4W				4-202-137-01 DOOR, REAR
R864	1-216-687-11	METAL CHIP	33K 0.50% 1/10W				*4-202-248-01 BAG, PROTECTION
R865	1-215-493-00	METAL	1M 1% 1/4W				*4-202-271-01 CUSHION (UPPER) (ASSY)
R866	1-216-687-11	METAL CHIP	33K 0.50% 1/10W				*4-202-272-01 CUSHION (LOWER) (ASSY)
R867	1-216-113-00	METAL GLAZE	470K 5% 1/10W				*4-202-273-01 TRAY
R868	1-249-428-11	CARBON	8.2K 5% 1/4W				*4-202-274-01 INDIVIDUAL CARTON
R871	1-249-493-11	CARBON	56K 5% 1/2W				*4-202-279-01 PALLET
R872	1-249-393-11	CARBON	10 5% 1/4W F				*4-396-077-01 JOINT
R873	1-249-393-11	CARBON	10 5% 1/4W F				REMOTE COMMANDER
R876	1-249-421-11	CARBON	2.2K 5% 1/4W F				1-466-804-11 REMOTE COMMANDER (RM-832)
R877	1-215-907-11	METAL OXIDE	22 5% 3W F				9-903-466-01 COVER, POCKET (FOR RM-832)
R884	1-216-697-11	METAL CHIP	82K 0.50% 1/10W				
R889	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
R891	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R893	1-215-878-00	METAL OXIDE	33K 5% 1W F				
R894	1-216-264-00	METAL GLAZE	560K 5% 1/8W				
R895	1-216-079-00	METAL GLAZE	18K 5% 1/10W				
R897	1-216-089-00	METAL GLAZE	47K 5% 1/10W				
R898	1-216-262-00	METAL GLAZE	470K 5% 1/8W				
R1501	1-216-674-11	METAL CHIP	9.1K 0.50% 1/10W				
R1502	1-216-663-11	METAL CHIP	3.3K 0.50% 1/10W				
R1503	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R1504	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
R1505	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
R1506	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W				
R1508	1-216-683-11	METAL CHIP	22K 0.50% 1/10W				
R1509	1-216-085-00	METAL GLAZE	33K 5% 1/10W				
R1510	1-249-382-11	CARBON	1.2 5% 1/4W F				
R1511	1-215-888-00	METAL OXIDE	220 5% 2W F				
R1512	1-216-370-11	METAL OXIDE	1.2 5% 2W F				
R1514	1-216-049-00	METAL GLAZE	1K 5% 1/10W				

Sony Corporation
TV Group